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THE Journal OF THE Kansas Medical Society

APRIL
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VOL. LX
NO. IV

introducing

Chloromycetin® Succinate

so versatile you can give it intramuscularly

intravenously

subcutaneously

CHLOROMYCETIN SUCCINATE is a soluble ester of **CHLOROMYCETIN** that can be administered intramuscularly, intravenously, or subcutaneously. Highly soluble in water or other aqueous parenteral fluids, **CHLOROMYCETIN SUCCINATE** solution is easily prepared for use by recommended parenteral routes in a wide range of concentrations. Tissue reaction at the site of injection is minimal,[1] permitting continuous daily dosage, even in pediatric patients.[3]

RAPID, EFFECTIVE BLOOD LEVELS

CHLOROMYCETIN SUCCINATE is rapidly hydrolyzed by body esterases and produces effective blood and tissue concentrations of **CHLOROMYCETIN** within a short time.[1] Although the intravenous route provides high immediate serum concentrations, after four hours the blood levels of **CHLOROMYCETIN** for all three routes are about equal, and effective concentrations are maintained for eight hours.[2]

WIDE-SPECTRUM ANTIMICROBIAL EFFECTIVENESS

CHLOROMYCETIN SUCCINATE, providing broad-spectrum antimicrobial effectiveness, may be used whenever **CHLOROMYCETIN** is indicated. It has produced effective response in respiratory, gastrointestinal, and rickettsial infections.[3-5] Because of the rapid, effective blood levels of **CHLOROMYCETIN** provided, it is especially useful in *Hemophilus influenzae* meningitis, in certain septicemias, typhoid fever, and other *Salmonella* infections.[3,5]

TYPICAL CLINICAL EXPERIENCE WITH CHLOROMYCETIN SUCCINATE

Type of infection	Number of Patients	RESULTS Excellent to Good	Fair	Poor
Respiratory[3,4*]	32	32		
Shigella dysentery[2]	14	14		
Enteritis[2]	10	6	2	2
Bacteremia[3,5]	5	5		
Meningitis[3,5]	4	3		1**
Rocky Mountain spotted fever[3,5]	2	2		
Ear abscess with cellulitis[1]	1	1		
Lung abscess[4]	1			1
Typhoid fever[5]	1	1		
TOTALS	70	64	2	4

*Includes 15 patients who were administered **CHLOROMYCETIN SUCCINATE** by nebulization under intermittent positive pressure breathing.

**Patient was hydrocephalic at birth; cerebrospinal fluid was sterile at time of death.

WELL TOLERATED

CHLOROMYCETIN SUCCINATE is well tolerated, even by small children. Signs of irritation at injection sites have been few.[1-5] Its relative freedom from irritation makes it possible to use **CHLOROMYCETIN SUCCINATE** for prolonged periods in patients who are not able to take oral medication.

DOSAGE AND ADMINISTRATION—*Adults:* 1 Gm. every six to eight hours. *Children:* 100 mg. per Kg. of body weight per day in divided doses at six- to eight-hour intervals. The total dose in children should not exceed the adult dose of 1 Gm. given at any single injection, with exception of treatment of *Hemophilus influenzae* meningitis in which higher doses are employed.

In all cases, severity of infection and clinical response to therapy should be the guiding factors determining the proper dosage schedule. Premature and full-term newborn infants require special dosage supervision. For details see literature.

SUPPLY— **CHLOROMYCETIN SUCCINATE** (chloramphenicol sodium succinate, Parke-Davis) is supplied in Steri-Vials,® each containing the equivalent of 1 Gm. chloramphenicol; packages of 10.

CHLOROMYCETIN is a potent therapeutic agent and, because certain blood dyscrasias have been associated with its administration, it should not be used indiscriminately, or for minor infections. Furthermore, as with certain other drugs, adequate blood studies should be made when the patient requires prolonged or intermittent therapy.

REFERENCES—(1) Glazko, A. J., *et al.*, in Welch, H., & Marti-Ibañez, F.: Antibiotics Annual 1957-1958, New York, Medical Encyclopedia, Inc., 1958, p. 792. (2) Unpublished data: Research Laboratories, Parke, Davis & Company, 1958. (3) Ross, S.; Puig, J. R., & Zaremba, E. A., in Welch, H., & Marti-Ibañez, F.: Antibiotics Annual 1957-1958, New York, Medical Encyclopedia, Inc., 1958, p. 803. (4) Payne, H. M., & Hackney, R. L., Jr.: *ibid.*, p. 821. (5) McCrumb, F. R., Jr.; Snyder, M. J., & Hicken, W. J.: *ibid.*, p. 837.

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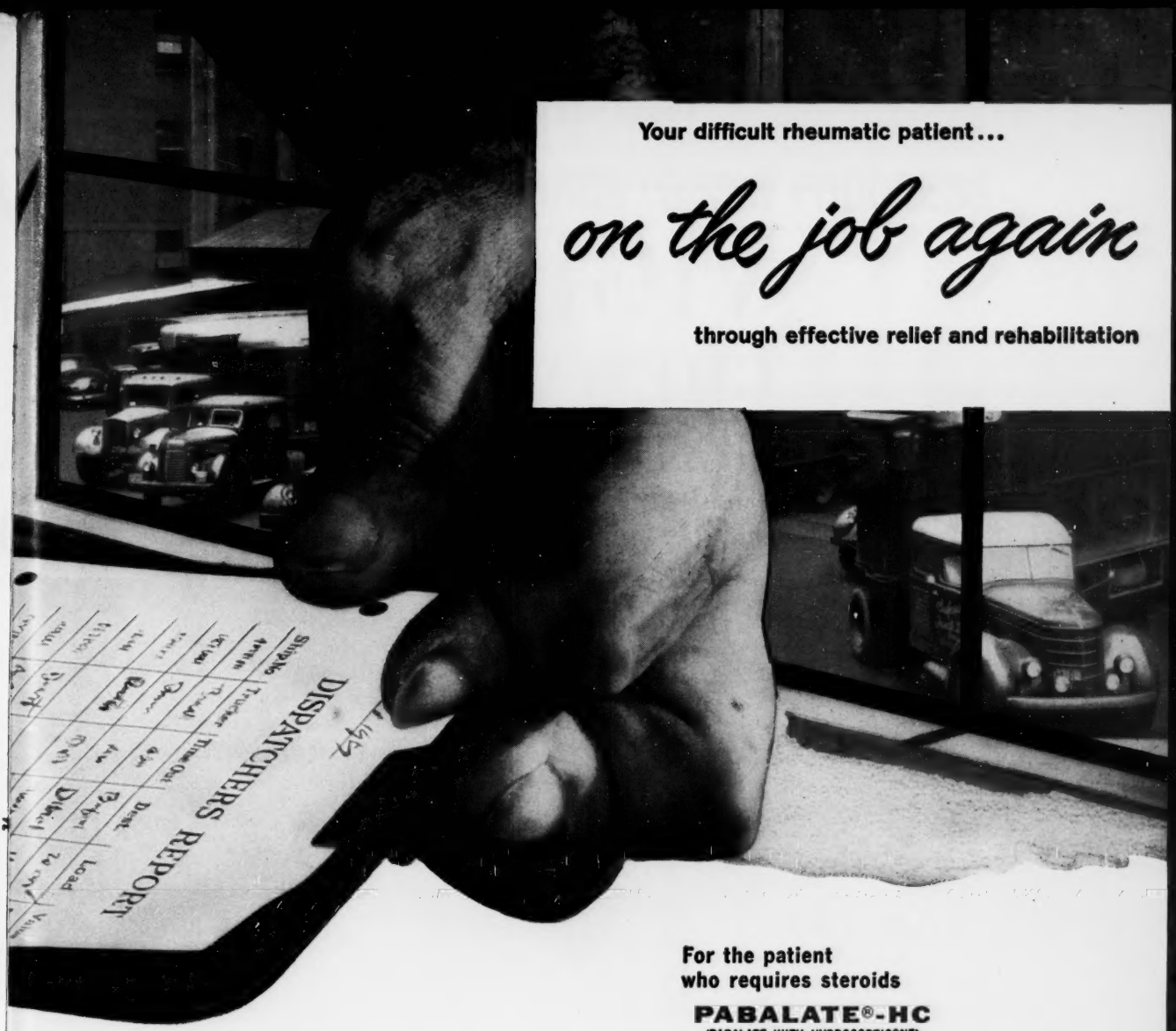

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in edema

whenever there is need for diuresis

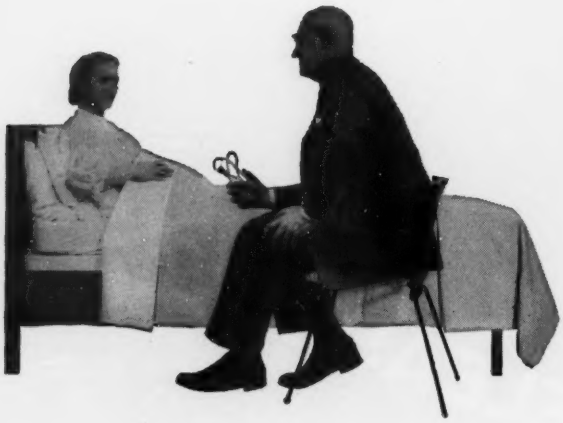
in hypertension

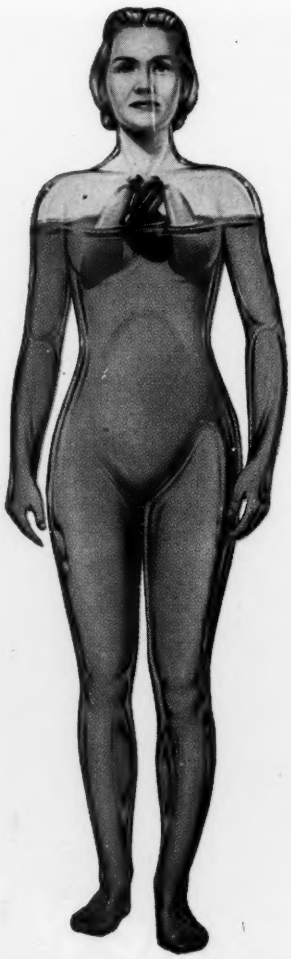
effective by itself in some patients—always as background medication in any antihypertensive regimen.

summary of clinical information—HYDRODIURIL (HYDROCHLOROTHIAZIDE)

IN EDEMA:

- greater oral effectiveness than with any other class of diuretic agent
- diuretic effectiveness maintained even on prolonged daily administration
- 25 mg. HYDRODIURIL orally is equivalent to 1.6 cc. meralluride I.M.
- has been reported to be effective even in patients who did not respond satisfactorily to other diuretics
- low toxicity—extremely well tolerated
- often achieves the benefits of a low salt diet without the unpleasant restrictions





HYDRODIURIL (HYDROCHLOROTHIAZIDE)

- highly-active derivative of chlorothiazide
- similar qualitatively to chlorothiazide but 10 to 12 times more potent
- loss of potassium is clinically insignificant in the great majority of patients on normal diets

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NEW RELEASE

IN HYPERTENSION:

- provides background therapy in any antihypertensive regimen (by itself, HYDRODIURIL adequately controls hypertension in some patients)
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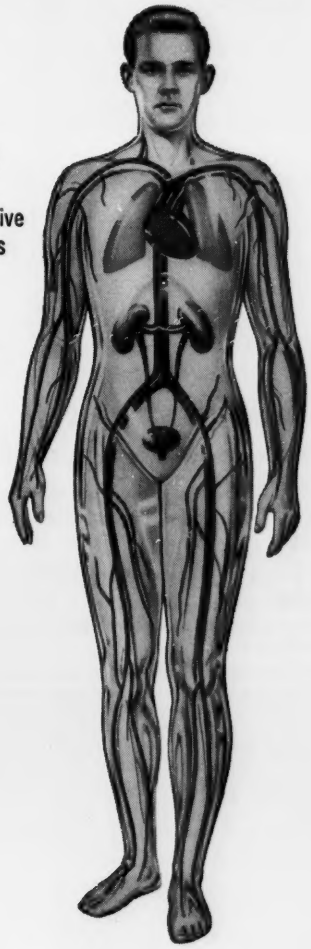
- does not lower blood pressure in normotensives
- markedly potentiates other antihypertensive agents
- reduces dosage requirements for other agents, often with concomitant reduction in their distressing side effects
- smooths out blood pressure fluctuations



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2. Congestive heart failure of all degrees of severity
3. Premenstrual tension (edema)
4. Edema of pregnancy
5. Renal edema—nephrosis; nephritis
6. Cirrhosis with ascites
7. Drug-induced edema
8. as adjunctive therapy in the management of obesity complicated by edema

RECOMMENDED DOSAGE RANGE

In **EDEMA:** one to two 50 mg. tablets HYDRODIURIL once or twice a day

In **HYPERTENSION:** one or two 25 mg. tablets or one 50 mg. tablet HYDRODIURIL once or twice a day. (When HYDRODIURIL is used with a ganglion blocking agent, it is mandatory to reduce the dose of the latter by at least 50 per cent, immediately upon adding HYDRODIURIL to the regimen.)

SUPPLIED as 25 mg. and 50 mg. scored tablets, in bottles of 100 and 1000.

PRECAUTIONS:

It is important that dosage be adjusted as frequently as the needs of the individual patient demand.

HYDRODIURIL has shown no adverse effects on renal function and is essentially not nephrotoxic; for this reason it may be used with excellent results even in patients for whom organomercurials are contraindicated because of renal damage. The excretion of potassium is much lower than that of sodium and chloride and, as is the case with DIURIL®, the loss of potassium is clinically insignificant in the great majority of patients on normal diets. If indicated, this potassium loss may be easily replaced by including potassium-rich foods in the diet (orange juice, bananas, etc.).

Additional information on HYDRODIURIL is available on request.

BIBLIOGRAPHY:

1. Esch, A.F., Wilson, I.M., Freis, E.D.: 3,4-Dihydrochlorothiazide: Clinical Evaluation of a New Saluretic Agent. Preliminary Report; M. Ann. District of Columbia 28:9, (Jan.) 1959.
2. Ford, R.V.: The Clinical Pharmacology of Hydrochlorothiazide; Southern Med. J. 52:40, (Jan.) 1959.
3. Fuchs, M., Bodi, T., Irie, S., and Moyer, J.H.: Preliminary Evaluation of Hydrochlorothiazide ('HYDRODIURIL'); M. Rec. & Ann. 51:872, (Dec.) 1958.
4. Moyer, J.H., Fuchs, M., Irie, S., and Bodi, T.: Some Observations on the Pharmacology of Hydrochlorothiazide; Am. J. Cardiol. 3:113, (Jan.) 1959.

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References: 1. Hart, D.; Bagnall, A. W.; Bunim, J. J., and Polley, F. H.: Ninth International Congress on Rheumatic Diseases, Toronto, Ont. (June 25) 1957. 2. Report of Joint Committee, Medical Research Council & Nuffield Foundation, Treatment of Rheumatoid Arthritis, British Medical Journal (April 13) 1957. 3. Friend, D. G.: New England J. Med. 257:278 (Aug.) 1957.

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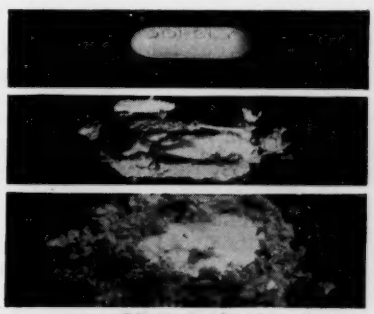

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REFERENCES:
1. Eisenberg, B. C.: Clinical Medicine *5*:897-904 (July) 1958.
2. Feinberg, A. R., et al.: J. Allergy *29*:358 (July) 1958.
3. Robinson, H. M., et al.: So. Med. J. *50*:1282 (Oct.) 1957.

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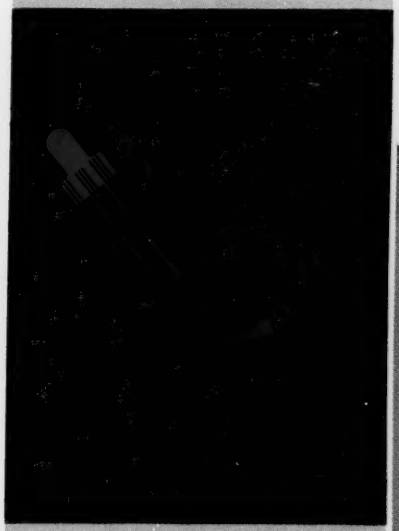

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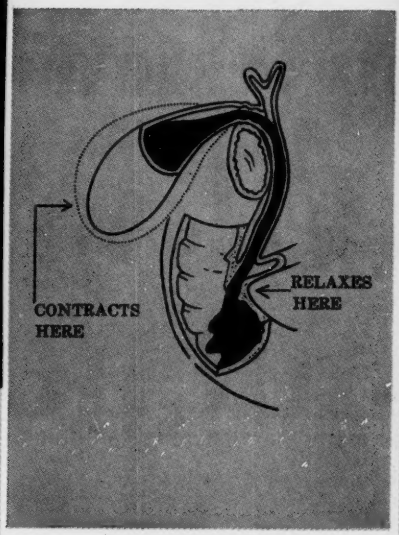

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1. Herland, A. L., Lowenstein, A.: Quart. Rev. Surg. Obst. & Gynec. 14:196 (Dec.) 1957

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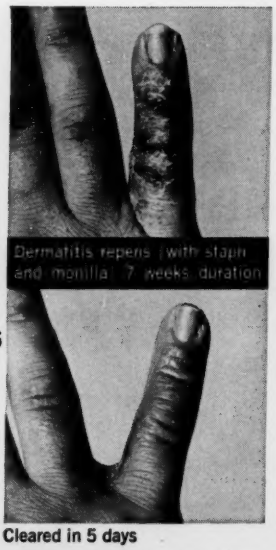
new for total management of itching,[1,2] inflamed,[3,4] infected[5,6] skin lesions



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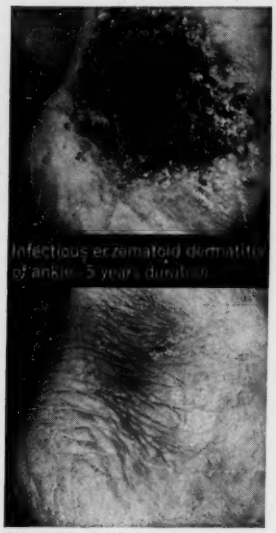


Cleared in 20 days

Mycolog Ointment – containing the new superior topical corticoid Kenalog – reduces inflammation,[3,4] relieves itching,[1,2] and combats or prevents bacterial, monilial and mixed infections.[5-7] It is extremely well tolerated, and assures a rapid, decisive clinical response for most infected dermatoses.

> "Thirty-one of 38 patients . . . obtained excellent or good control of dermatological lesions . . . (Mycolog) was highly effective, particularly in the management of mixed infections. Several recalcitrant eruptions which had not responded to previous therapy were remarkably responsive to the daily application of this preparation over periods of 2 to 3 weeks."[8]

For total management of itching, inflamed, infected skin lesions, Mycolog contains triamcinolone acetonide, an outstanding new topical corticoid for prompt, effective relief of itching, burning and inflammation[1-4] – neomycin and gramicidin for powerful antibacterial action[7] – and nystatin for treating or preventing Candida (Monilia) albicans infections.[8,9]

Application: Apply 2 to 3 times daily. Supply: 5 Gm. and 15 Gm. tubes. Each gram supplies 1.0 mg. (0.1%) triamcinolone acetonide, 2.5 mg. neomycin base, 0.25 mg. gramicidin, and 100,000 units nystatin in PLASTIBASE.

References: 1. Shelmire, J.B., Jr.: Monographs on Therapy 3:164 (Nov.) 1958. • 2. Nix, T.E., Jr., and Derbes, V.J.: Monographs on Therapy 3:123 (Nov.) 1958. • 3. Robinson, R.C.V.: Bull. School of Med., U. Maryland 43:54 (July) 1958. • 4. Sternberg, T.H.: Newcomer, V.D., and Reisner, R.M.: Monographs on Therapy 3:115 (Nov.) 1958. • 5. Clark, R.F., and Hallett, J.J.: Monographs on Therapy, 3:153 (Nov.) 1958. • 6. Smith J.G., Jr.; Zawisza, R.J., and Blank, H.: Monographs on Therapy, 3:111 (Nov.) 1958. • 7. Monographs on Therapy, 3:137 (Nov.) 1958. • 8. Howell, C.M., Jr.: North Carolina M.J. 19:449 (Oct.) 1958. • 9. Bereston, E.S.: South. M.J. 50:547 (April) 1957.

And whatever the topical corticoid need, a suitable Squibb formulation is available—Kenalog-S Lotion—7½ cc. plastic squeeze bottles. Each cc. supplies 1.0 mg. (0.1%) triamcinolone acetonide, 2.5 mg. neomycin base and 0.25 mg. gramicidin. Kenalog Cream, 0.1%—5 Gm. and 15 Gm. tubes. Kenalog Lotion, 0.1%—15 cc. plastic squeeze bottles. Kenalog Ointment, 0.1%—5 Gm. and 15 Gm. tubes.

SQUIBB

Squibb Quality — the Priceless Ingredient

'SPECTROCIN'®, 'MYCOSTATIN'®, 'PLASTIBASE'®, 'MYCOLOG' AND 'KENALOG' ARE SQUIBB TRADEMARKS

Proven

in over three years of clinical use
in over 600 clinical studies

Specific

FOR RELIEF OF ANXIETY AND MUSCLE TENSION

Selective

Does not interfere with autonomic function
Does not impair mental efficiency,
motor control, or normal behavior
Has not produced hypotension,
agranulocytosis or jaundice

MEPROBAMATE (WALLACE)

Miltown®

Supplied: 400 mg. scored tablets, 200 mg. sugar-coated tablets.

WALLACE LABORATORIES, New Brunswick, N. J.

THE HEART DISEASE PATIENT NEEDS RELIEF FROM EMOTIONAL STRESS

ANXIETY INTENSIFIES the physical disorder in heart disease. "The prognosis depends largely on the ability of the physician to control the anxiety factor, as well as the somatic disease."

(Friedlander, H. S.: The role of ataraxics in cardiology. Am. J. Cardiol. 1:395, March 1958.)

TRANQUILIZATION WITH MILTOWN enhances recovery from acute cardiac episodes and makes patients more amenable to necessary limitations of activities.

(Waldman, S. and Pelner, L.: Management of anxiety associated with heart disease. Am. Pract. & Digest Treat. 8:1075, July 1957.)

Miltown®

meprobamate (Wallace)

Available in 400 mg. scored and 200 mg. sugar-coated tablets. Also available as MEPROSPAN* (200 mg. meprobamate *continuous release* capsules). In combination with a nitrate, for angina pectoris: MILTRATE* (Miltown 200 mg. + PETN 10 mg.).

Miltown causes no adverse effects on heart rate, blood pressure, respiration or other autonomic functions.

*TRADE-MARK CM-8275

WALLACE LABORATORIES, *New Brunswick, N. J.*

The Story of Kent

How Lorillard research produced a cigarette with less tars and nicotine than any other leading filter brand

A major research foundation, under Lorillard sponsorship, determined that the average puff of cigarette smoke contained over 12 billion semi-solid particles. Further research revealed that inhaled smoke from ordinary cigarettes has a predominant proportion of particles, from 0.1 to 1 micron in diameter, average 0.6 micron.

Ordinary filter fibers are so large that they create spaces through which the small semi-solid smoke particle can easily pass. However, in the superior Kent filter, the fibers are mechanically manipulated in such a manner as to create extremely tortuous passageways for the smoke. This is the "MICRONITE" Filter.

The Kent filter is composed of pure cellulose acetate, which is common to the filters used in all leading brands. However, the physical construction of the Kent filter is the exclusive development of Lorillard research, and is different from and superior to all the rest.

Thus, Lorillard research created a filter of ideal purity, with extraordinary ability to eliminate smoke particles... and at the same time, a cigarette of such fine taste that during the past twelve months more smokers changed to Kent than to any other cigarette in America.

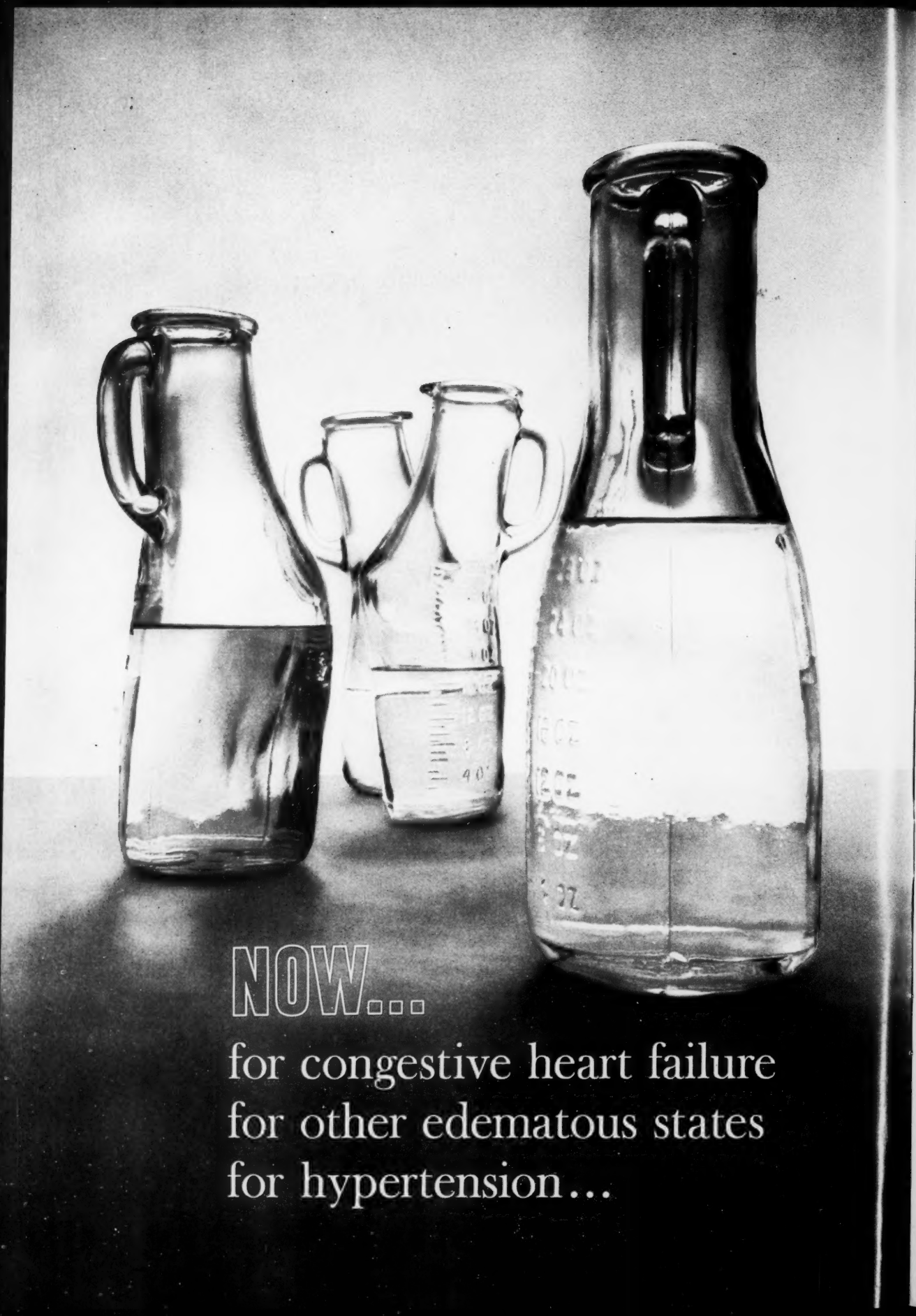
Of all leading filter cigarettes

KENT FILTERS BEST

You get less tars and nicotine in the smoke of Kent than in any other leading filter cigarette in America

If you would like for your own use the booklet, "The Story of Kent," write to:

P. Lorillard Company, Research Department
200 East 42nd St., N.Y. 17, N.Y.


NOW...
for congestive heart failure
for other edematous states
for hypertension...

Clinical data ▶

highest fluid yields,
lowest blood pressure levels
yet achieved with oral
diuretic-antihypertensive
therapy...

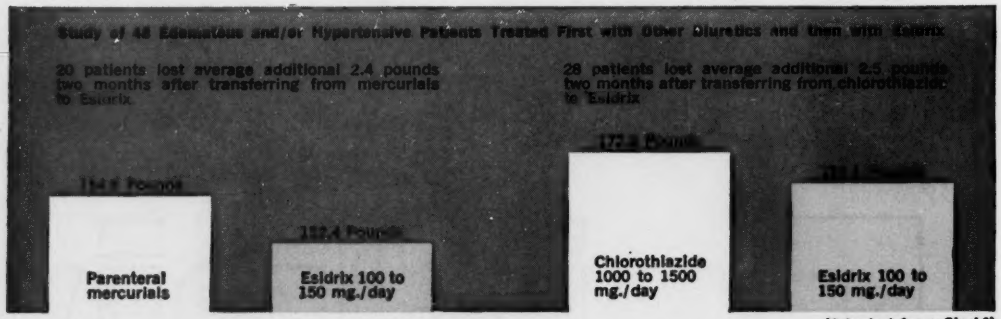
Esidrix T.M.

(hydrochlorothiazide CIBA)

Esidrix: 10 to 15 times more active than chlorothiazide in edema and hypertension

Esidrix relieves edema in many patients refractory to other diuretics: Studies reveal that certain patients unresponsive or refractory to mercurials and chlorothiazide respond readily to Esidrix. Brest and Likoff[1] observed that 9 of 12 patients with congestive heart failure – who failed to respond to other diuretics – were completely controlled with Esidrix. Esidrix appears to have clinical value even after the patient has developed partial tolerance to chlorothiazide, and may be found useful in cases of sensitivity to chlorothiazide.[2]

Therapy with Esidrix often results in more weight loss than with other diuretics: In a study[3] of 48 patients with edema and/or hypertension, who were treated originally with chlorothiazide or with mercurial diuretics, substitution of Esidrix at a dose of 100 to 150 mg./day resulted in additional average weight loss of 2.4 to 2.5 pounds.


Study of 48 Edematous and/or Hypertensive Patients Treated First with Other Diuretics and then with Esidrix
20 patients lost average additional 2.4 pounds two months after transferring from mercurials to Esidrix
28 patients lost average additional 2.5 pounds two months after transferring from chlorothiazide to Esidrix
Parenteral mercurials
Esidrix 100 to 150 mg./day
Chlorothiazide 1000 to 1500 mg./day
Esidrix 100 to 150 mg./day
(Adapted from Clark[3])
Esidrix Dose

REFERENCES:
1. Brest, A. N., and Likoff, W.: Am. J. Cardiol. *3*:144 (Feb.) 1959. 2. Esch, A. F., Wilson, I. M., and Freis, E. D.: M. Ann. District of Columbia *28*:9 (Jan.) 1959. 3. Clark, G. M.: Clinical report to CIBA. 4. Dennis, E. W.: Clinical report to CIBA. 5. Hejtmancik, M. R., Herrmann, G. R., and Kroetz, F. W.: In press. [A preliminary report by these investigators has been published in Texas J. Med. *54*:854 (Dec.) 1958.]

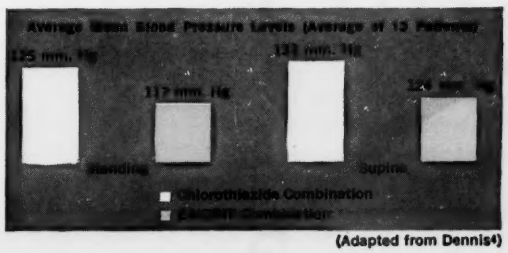
A product of CIBA research

CIBA SUMMIT N.J.

Esidrix .T.M.

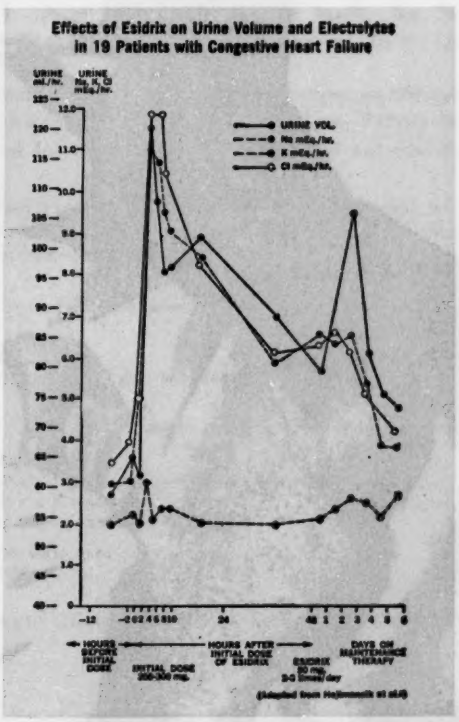
(hydrochlorothiazide CIBA)

Produces greater average reduction in blood pressure: Eleven of 13 hypertensive patients[4] were treated initially with a chlorothiazide-mecamylamine-reserpine combination (10 patients had 1000 mg. and 1 patient 500 mg. chlorothiazide daily); 1 patient had been treated with hydralazine and 1 had no previous medication. Nine were then transferred to an Esidrix-mecamylamine-reserpine combination and 4 to an Esidrix-reserpine combination for periods of 3 to 7 weeks (12 patients had 100 mg. and 1 patient 50 mg. Esidrix daily). Average mean blood pressure levels were recorded in the standing and supine positions. As shown in graph below, left, there was a further drop in blood pressure after patients were transferred to Esidrix.



(Adapted from Dennis[4])

Exceptional safety . . . reduced likelihood of electrolyte imbalance: While Esidrix markedly increases sodium and chloride excretion, it has far less effect on excretion of potassium (see chart at right) and bicarbonate. Hence, there is little likelihood of disturbing electrolyte balance when recommended procedures are followed.

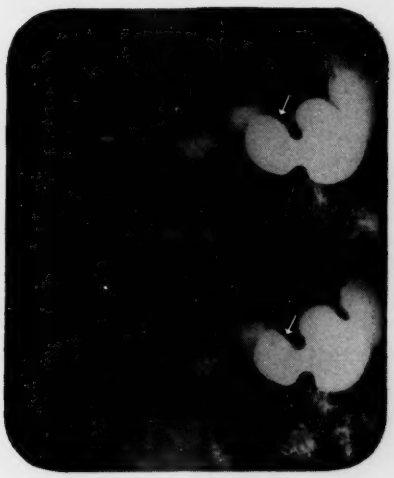

Effects of Esidrix on Urine Volume and Electrolytes in 19 Patients with Congestive Heart Failure
URINE VOL.
Na mEq./hr.
K mEq./hr.
Cl mEq./hr.
HOURS BEFORE INITIAL DOSE
INITIAL DOSE 200-300 mg.
HOURS AFTER INITIAL DOSE OF ESIDRIX
ESIDRIX 50 mg. 2-3 times/day
DAYS ON MAINTENANCE THERAPY

DOSAGE: Esidrix is administered orally in an average dose of 75 to 100 mg. daily, with a range of 25 to 200 mg. A single dose may be given in the morning or tablets may be administered 2 or 3 times a day.

SUPPLIED: *Tablets*, 25 mg. (pink, scored); bottles of 100 and 1000. *Tablets*, 50 mg. (yellow, scored); bottles of 100 and 1000.

relieve the tension

—and control its G.I. sequelae



Patient A.S., age 53.
Intermittent crises of severe pain over 2 year period; hospital management with Sippy regimen provided relief of symptoms; however, symptoms recurred after each sojourn.

PATHIBAMATE *(Tabs. ŧ t.i.d. and H.S.);* prompt relief of symptoms. Radiograph (21 days later) confirms healing of minute lesser curvature gastric ulcer crater.

predictable results in the control of tension and G.I. trauma

Pathibamate®

Meprobamate with PATHILON® Tridihexethyl Chloride* LEDERLE

Used prophylactically in anticipation of periods of emotional stress, or therapeutically to relieve tension and curb hypermotility and hypersecretion, PATHIBAMATE is particularly well-formulated for the control of gastrointestinal disorders.

PATHIBAMATE combines Meprobamate (400 mg.) — the noted tranquilizer-muscle relaxant widely accepted for safe management of tension and anxiety states — and PATHILON (25 mg.) — an extremely well-tolerated anticholinergic, long noted for prompt symptomatic relief based on peripheral atropine-like action with few side effects.

Indications:
Duodenal ulcer, gastric ulcer, intestinal colic, spastic and irritable colon, ileitis, esophageal spasm, anxiety neurosis with gastrointestinal symptoms, gastric hypermotility.

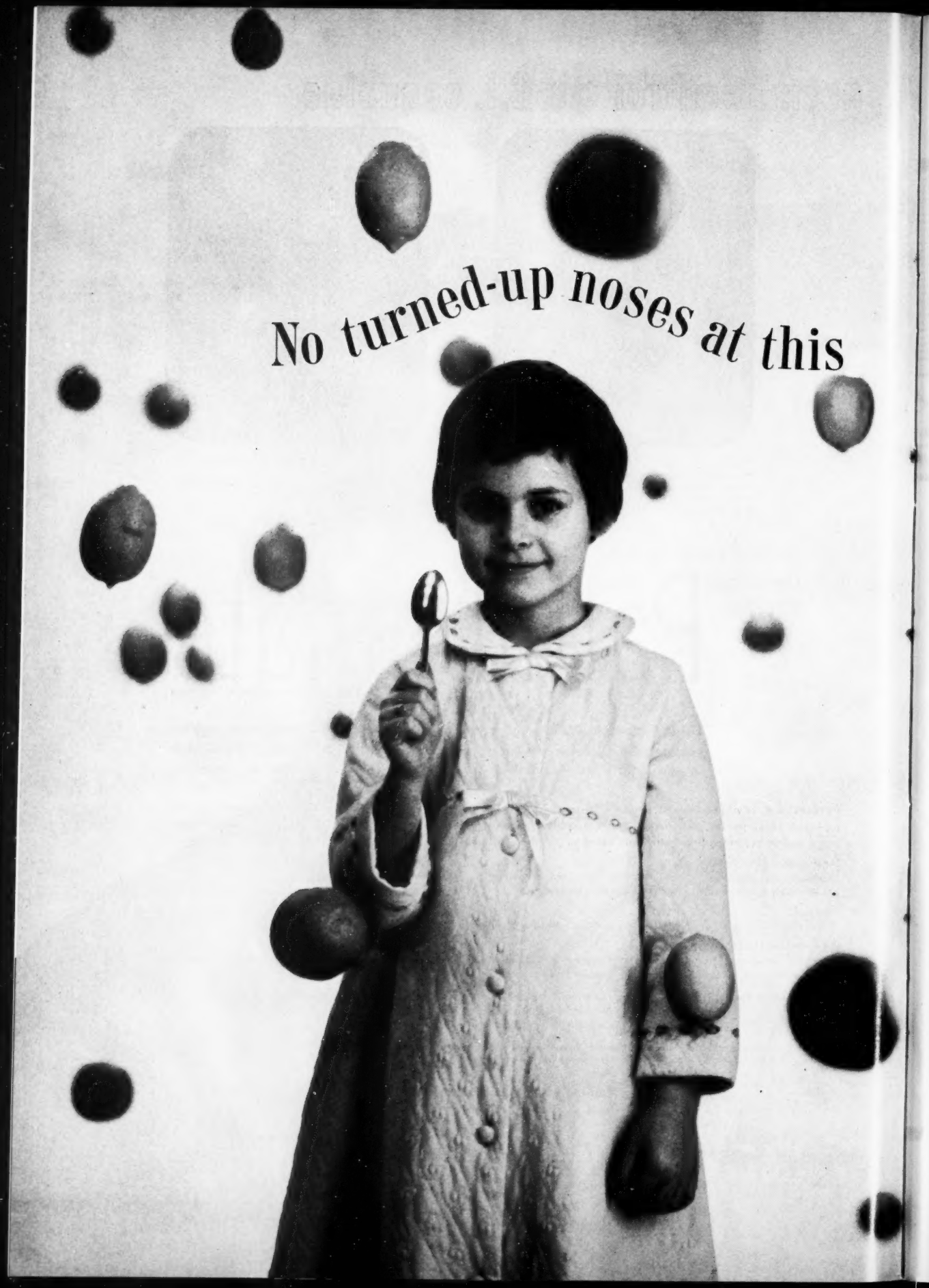
Supplied:
Bottles of 100 and 1,000. Each tablet (yellow, ½-scored) contains Meprobamate, 400 mg.; PATHILON Tridihexethyl Chloride, 25 mg.

Administration and Dosage:
1 tablet three times a day at mealtimes and 2 tablets at bedtime. Adjust dosage to patient response. Contraindicated in glaucoma, pyloric obstruction, and obstruction of the urinary bladder neck.

Also Available: PATHILON in four forms — *Tablets* of 25 mg., plain (pink) or with *phenobarbital,* 15 mg. (blue);
Parenteral — 10 mg./cc. — 1 cc. ampuls;
Pediatric Drops — 5 mg./cc. — dropper vials of 15 cc.

*PATHILON is now offered as tridihexethyl chloride instead of the iodide, an advantage permitting wider use, since the latter could interfere with the results of certain thyroid function tests.

Lederle LEDERLE LABORATORIES, A Division of AMERICAN CYANAMID COMPANY, Pearl River, New York


No turned-up noses at this

new erythromycin suspension

CITRUS-FLAVORED

ERYTHROCIN®

Ethyl Succinate

ORAL SUSPENSION

a new derivative of erythromycin designed especially for children

Never a flavor like this in an antibiotic suspension

A new achievement in pharmaceutical elegance—a ready-mixed stable suspension so sweet and good you can't tell it's "medicine." No bitterness, no unpleasant aftertaste—just pure, sweet citrus flavor.

Never an antibiotic better proved against everyday coccal infections

After millions of prescriptions, an unexcelled safety record. High, peak blood levels within one hour—plus nearly 100% effectiveness against coccal infections. And, unlike broad-spectrum antibiotics, Erythrocin is classed as a bactericidal antibiotic.

INDICATIONS: Against staph-, strep- and pneumococci. Especially useful when patients are allergic to penicillin or other antibiotics. DOSAGE: For children, 30 mg./Kg. per day. Adults, 1 to 2 Gm. daily, depending on severity of infection. SUPPLIED: in 60-cc., pour-lip bottles. Each 5-cc. teaspoonful represents 200-mg. of Erythrocin activity.

Abbott

® ERYTHROMYCIN ETHYL SUCCINATE, ABBOTT

004081

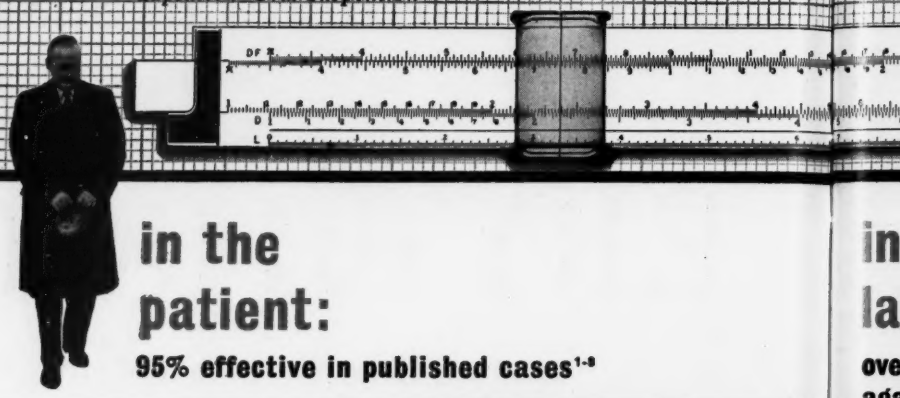
PRONOUNCED TAY-O

Rx Tao*

(troleandomycin)

Capsules / Oral Suspension

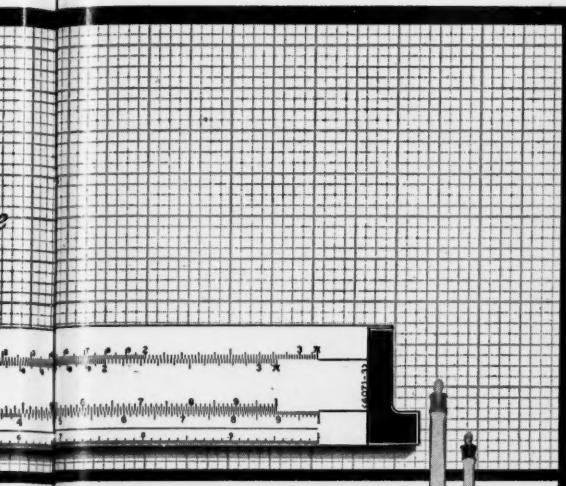
designed for superior control of common Gram-positive infections



in the patient:

95% effective in published cases[1-9]

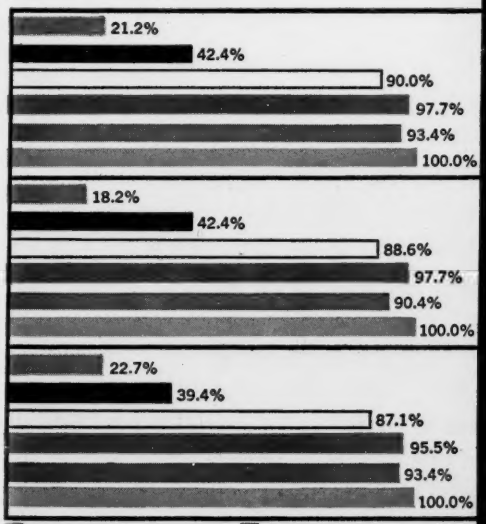
Conditions treated	No. of Patients	Cured	Improved	Failure
ALL INFECTIONS	558	448	80	30
Respiratory infections	258	208	31	19
Pharyngitis and/or tonsillitis	65	58	5	2
Pneumonia	90	66	17	7
Infectious asthma	44	38	–	6
Otitis media	31	29	2	–
Other respiratory (bronchitis, bronchiolitis, bronchiectasis, pneumonitis, laryngotracheitis, strep throat)	28	17	7	4
Skin and soft tissue infections	230	191	38	1
Infected wounds, incisions and lacerations	41	33	8	–
Abscesses	51	43	8	–
Furunculosis	58	51	6	1
Acne, pustular	43	28	15	–
Pyoderma	19	19	–	–
Other skin and soft tissue (infected burns, cellulitis, impetigo, ulcers, others)	18	17	1	–
Genitourinary infections	28	19	3	6
Acute pyelitis and cystitis	10	8	2	–
Urethritis with gonorrhea or cystitis	8	8	–	–
Pyelonephritis	4	1	–	3
Salpingitis	5	1	1	3
Pelvic inflammation with endometriosis	1	1	–	–
Miscellaneous (adenitis, enteritis, enterocolitis, subacute bacterial endocarditis, fever, hematoma, staphylococcus carriers, osteomyelitis, tenosynovitis, septic arthritis, acute bursitis, periarthritis)	42	30	8	4



in the laboratory:

over 90% effective against resistant staph

COMPARATIVE TESTS BY THREE METHODS (DISC, TUBE DILUTION, CYLINDER PLATE) ON 130 STAPHYLOCOCCI[9]



Percentage of organisms inhibited by the range of concentrations listed for each antibiotic.

Other Tao advantages:

Rapidly absorbed—stable in gastric acid,[7] TAO needs no retarding protective coating

Low in toxicity—freedom from side effects in 96% of patients treated; cessation of therapy is rarely required

Highly palatable—"practically tasteless"[7] active ingredient in a pleasant cherry-flavored medium.

Dosage and Administration: Dosage varies according to the severity of the infection. **For adults,** the average dose is 250 mg. q.i.d.; to 500 mg. q.i.d. in more severe infections. **For children** 8 months to 8 years, a daily dose of approximately 30 mg./Kg. body weight in divided doses has been found effective. Since TAO is therapeutically stable in gastric acid, it may be administered without regard to meals.

Supplied: TAO Capsules—250 mg. and 125 mg., bottles of 60. TAO for Oral Suspension—1.5 Gm., 125 mg. per teaspoonful (5 cc.) when reconstituted; unusually palatable cherry flavor; 2 oz. bottle.

References: 1. Koch, R., and Asay, L. D.: J. Pediat., in press. 2. Leming, B. H., Jr., et al.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958. 3. Mellman, et al.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958. 4. Olansky, S., and McCormick, G. E., Jr.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958. 5. Shubin, H., et al.: Antibiotics Annual 1957-1958, New York, N. Y., Medical Encyclopedia, Inc., 1958, p. 679. 6. Isenberg, H., and Kareiitz, S.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958. 7. Wennersten, J. R.: Antibiotic Med. & Clin. Therapy 5:527 (Aug.) 1958. 8. Kaplan, M. A., and Goldin, M.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958. 9. Truant, J. P.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958.

Tao dosage forms— for specific clinical situations

Tao Pediatric Drops

For children—flavorful, easy to administer.

Supplied: When reconstituted, 100 mg. per cc. Special calibrated droppers—5 drops (approx. 25 mg.) and 10 drops (approx. 50 mg.). 10 cc. bottle.

Tao-AC (Tao analgesic, antihistaminic compound)

To eradicate pain and physical discomfort in respiratory disorders.

Supplied: In bottles of 36 capsules.

Taomid® (Tao with triple sulfas)

For dual control of Gram-positive and Gram-negative infections.

Supplied: Tablets, bottles of 60. Oral Suspension, bottles of 60 cc.

Intramuscular or Intravenous

For direct action—in clinical emergencies.

Supplied: In 10 cc. vials.

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Division, Chas. Pfizer & Co., Inc.
Science for the World's Well-Being

waterloo for an ulcer...

Napoleon exhibited ulcer symptoms through most of his adult life, yet he scorned medication for his everlasting "spasms of nervous origin." He ignored his infirmities with violent naïveté despite an intense interest in medical science. Thus, the classic hand-in-coat pose may have been the result of his paroxysms of gastric pain that sliced "like the stab of a penknife."

When your patient is besieged with an ulcer, Robins provides you with an armamentarium sufficient to repel it.

frontal assault—If your tactics dictate Local Action, try ROBALATE,® which is dihydroxy aluminum aminoacetate (0.5 Gm. per tablet or 5 cc.), an antacid of definitely superior efficacy.

encirclement—If you prefer to approach the ulcer Systemically, prescribe DONNATAL,® the anticholinergic-antispasmodic-sedative with the time-tested *natural* belladonna alkaloids and phenobarbital, a veteran campaigner without peer. FORMULA: hyoscyamine sulfate, 0.1037 mg.; atropine sulfate, 0.0194 mg.; hyoscine hydrobromide, 0.0065 mg.; and phenobarbital (¼ gr.), 16.2 mg.

multi-pronged attack—If you relish the strategy of combining antacid and antispasmodic-anticholinergic effects, use DONNALATE.® It combines one-half of a DONNATAL tablet with one ROBALATE, ideal allies for comprehensive ulcer therapy.

Victory will be yours.

A. H. ROBINS CO., INC. • RICHMOND, VA.

DONNALATE® Robins

to prevent the sequelae of u.r.i. ... and relieve the symptom complex

ACHROCIDIN®

Tetracycline-Antihistamine-Analgesic Compound Lederle

Pneumonitis, otitis, tonsillitis, adenitis, sinusitis or bronchitis develops as a serious bacterial complication in about one in eight cases of acute upper respiratory infection.[1] To protect and relieve the "cold" patient... ACHROCIDIN.

Usual dosage: 2 tablets or teaspoonfuls q.i.d. (equiv. 1 Gm. tetracycline). Each TABLET contains: ACHROMYCIN® Tetracycline (125 mg.); phenacetin (120 mg.); caffeine (30 mg.); salicylamide (150 mg.); chlorothen citrate (25 mg.). Also as SYRUP (lemon-lime flavored), caffeine-free.

1. Based on estimate by Van Volkenburgh, V. A., and Frost, W. H.: Am. J. Hygiene 71:122 (Jan.) 1933

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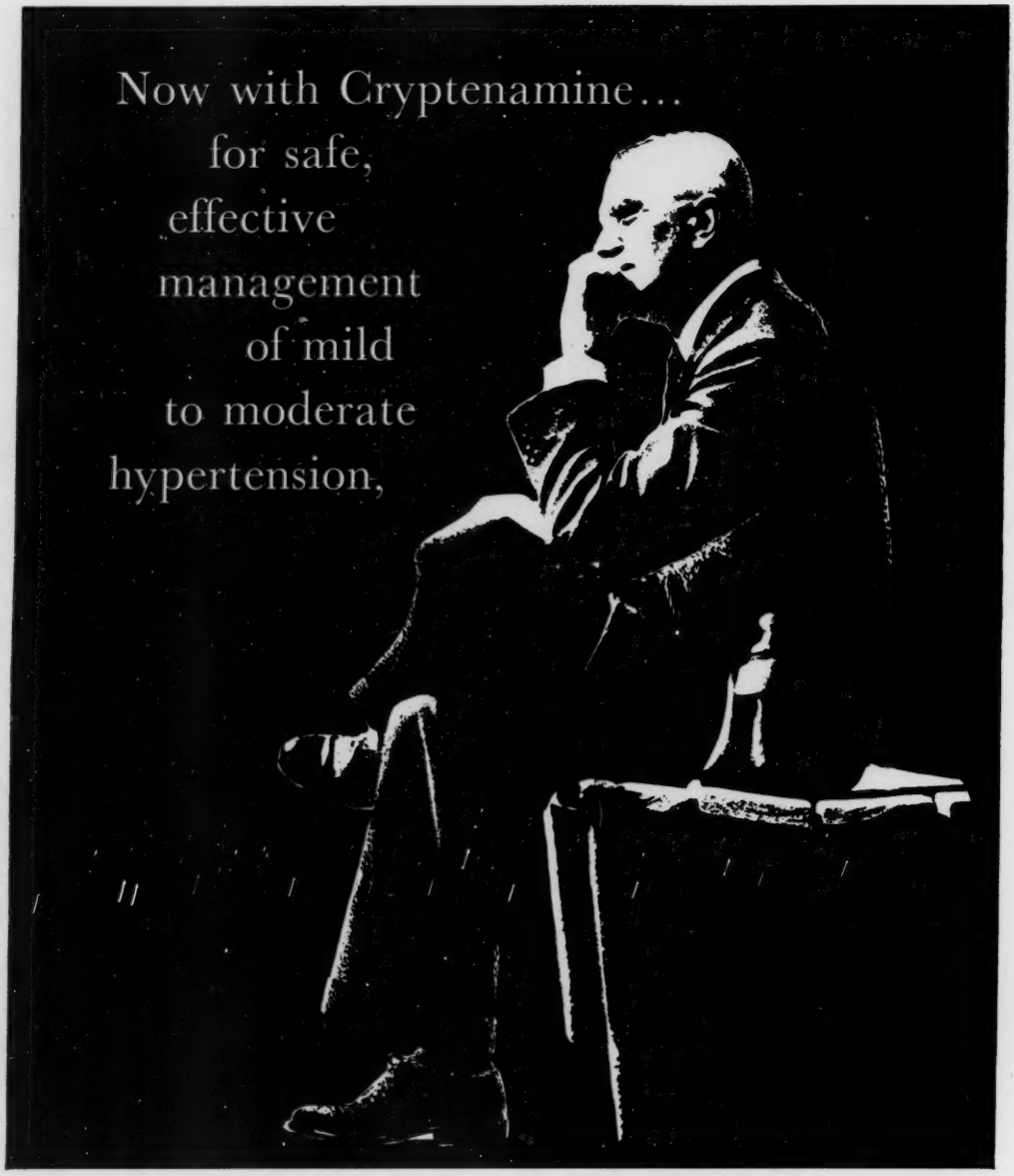

℞ Veratrite®

Prescribed with confidence 8,863,769 times Veratrite continues to be the antihypertensive of choice for treating geriatric patients.

Veratrite effectively reduces blood pressure through action on the sympathetic nervous system, without detriment to the cardiac output.

Each VERATRITE tabule contains:

Cryptenamine (tannates)	40 C.S.R.* Units
Sodium nitrite	1 gr.
Phenobarbital	¼ gr.

*Carotid Sinus Reflex

IRWIN, NEISLER & CO. • DECATUR, ILLINOIS

Neisler

Four weeks ago, Mrs. C. was an anxiety patient, complaining of weakness, trembling, sweating, tachycardia, on the slightest exertion. Her symptoms followed family reverses; home life became disorganized, she couldn't cope with housework. Therapy with TRILAFON, 4 mg. t.i.d., and a weekly office visit to discuss her feelings have worked wonders in reactivating this patient. She's on maintenance dosage now, 2 mg. t.i.d., able to work very well, and wide-awake and active all day long.

mobilizes patients immobilized by anxiety

Trilafon®
perphenazine

when you want to avoid drowsiness

- helps the patient contain anxiety, tension
- restores normal working capacity

TRILAFON Tablets—2 mg. and 4 mg.; bottles of 50 and 500.
TRILAFON REPETABS,® 8 mg.—4 mg. for *prompt* effect in the outer layer and 4 mg. for *prolonged relief* in the timed-action inner core; bottles of 30 and 100.
For complete details on TRILAFON consult Schering literature.

Schering

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TR-J-859

V-CILLIN K®...

dependable, fast, effective therapy

V-Cillin K produces therapeutic blood levels in all patients within five to fifteen minutes after administration—levels higher than those attained with any other oral penicillin. Infections resolve rapidly. *Dosage:* 125 or 250 mg. three times daily. *Supplied:* In scored tablets of 125 and 250 mg. (200,000 and 400,000 units).

New: V-Cillin K® Sulfa. Each tablet combines 125 mg. of V-Cillin K with 0.5 Gm. of the three preferred sulfonamides.

New: V-Cillin K, Pediatric, a taste treat for young patients. In bottles of 40 and 80 cc. Each 5-cc. teaspoonful provides 125 mg. of V-Cillin K.

V-Cillin K® (penicillin V potassium, Lilly)
V-Cillin K® Sulfa (penicillin V potassium with triple sulfas, Lilly)

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KANSAS MEDICAL SOCIETY

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Volume LX **APRIL, 1959** **No. 4**

Intrusion

A Social Psychological Approach to the Treatment of Chronic Mental Patients

LAWRENCE APPLEBY, Ph.D., ***Osawatomie***

There is certainly little doubt that mental illness or its counterpart, psychological health, is one of the central issues confronting our society today. The fact that mentally ill people number about 50 per cent of the total hospital bed count in this country is but one significant indicia that it is a problem of paramount importance.

When we speak of mental disorders we usually encompass a rather long array and variety of symptom constellations. Yet, a single glance at the crude statistics of a given mental hospital reveals what can be considered the major diagnostic source of difficulty: namely, those people categorized as suffering from a form of schizophrenia. This illness constitutes almost one-half of the total patient population and an even higher percentage among patients hospitalized for many years. Of further interest is that the opportunities for a functionally psychotic person to be released from the hospital decline from a ratio of six to ten during the first year of admission to about one chance in ten after he has been an inmate of an institution for two years.* It is thus apparent that the most challenging problem within the hospital is the schizophrenic patient. For that reason our attention was focused in particular on the case of long term residency.

This paper was read at a meeting of the Kansas Occupational Therapy Association at Osawatomie State Hospital, March, 1958. It represents a preliminary report of a current investigation supported by a project grant (OM-116) from the National Institute of Mental Health, United States Public Health Service.

Dr. Appleby is senior staff psychologist at the Osawatomie State Hospital.

* These percentages are actually the discharge rate in the year following the point of residency.

Despite a display of relative sophistication, there is a gap in our knowledge of the nature, causes, and treatment of mental disorders. The above figures in part reflect the elusiveness of chronic schizophrenics to successful rehabilitation. Such patients remain a scientific enigma. Consequently, especially within hospital structures, a somewhat extreme practice has evolved, employing one treatment after the other on a trial and error basis in anticipation that something beneficial will be found.

Such a pragmatic point of view implies that functional disorders are to some extent irreversible, in which case the patient is left with a handicap that he will have to contend with the rest of his days. Efforts here are devoted mainly toward symptomatic treatment, the goal being a "social improvement." Under these uncertain conditions, there is anxious hope that the patient will not have to return, or at least will stay out of the hospital for some reasonable length of time. In settings where there is a minimum of personnel, the chronic patient receives a limited amount of attention, more energy being invested in the acutely ill.

Within the last decade, however, a renewed interest has developed along with growing optimism for the rehabilitation of long-standing institutionalized patients. Impetus has come from various disciplines including psychiatry, biology, sociology, anthropology, and psychology. Among the more noted influences in treatment of severe mental illnesses are ataractic drugs, psychosurgery, and milieu programs. There has been, in addition, a revival of total push procedures which have proven quite successful in the past few years. There is also an increasing amount of

literature which describes the social and psychological parameters of the mental hospital and its relation to patient treatment.

The purpose of these observations was to set the stage and indicate that we are in a period of exploration and examination, an era characterized by evaluation of progress, new methods, theories, and research. It is within this scheme that we find ourselves; we have an opportunity to select from accruing data and a favorable time for integrating this information into novel ideas and techniques.

At this point it seems appropriate, as a meaningful departure, to present some of the critical implications which undoubtedly served as a guide in our approach to the question of chronic schizophrenia. The more crucial points of analysis revolve about such issues as (a) How does the hospital atmosphere contribute to and prolong the behavior of schizophrenic patients? (b) Are assets of hospital personnel exploited sufficiently toward instituting basic therapeutic programs? (c) Can an effective and yet economic treatment model be introduced into the present hospital structure?

Concept of Illness

Within our culture the state of sickness usually connotes a passive position on the part of the patient—a "do something for me" attitude. The duty then of those engaged in treatment is to assume liability and assist the person back to health. The passive-active stratum of illness is enhanced in the mental hospital where the accent unfortunately is on debility. This phenomenon is not necessarily restricted to mental hospitals but may be germane to institutional environs in general.

The staff, conditioned to think of mental ailments in terms equivalent to helpless plights, often interprets an objective failure of responsibility as a result of the patient's illness. Once concentration centers on dysfunction, the perspective for treatment potentialities becomes manifestly narrowed; personnel find themselves eventually in roles of solicitude, indulgence, and protection. The extreme patients, judged to be incompetent and incurable, present an even more exaggerated picture. They are considered virtually incapable of participating in normal activity and live in surroundings permeated with an aura of futility and hopelessness.

In the system where the patient is deprived of responsibility, or given only perfunctory obligations for himself, it is little wonder that Scher[12] concludes that not enough demands are made on patients to allow them to develop their own sense of decision-making. If it is our aim to return the patient to a normal orderly world, how is this feasible when we focus on illness instead of health, creating an artificial environment where the usual reality-oriented living process is minimized? This position is in close agreement with Scher's analysis[13] of a permissive hospital setting.

In other words, a community which is sensitive to the needs of illness and not responsive to those of health neither prepares the patient to accept his share of responsibilities and decisions nor motivates him to resume a normal role in society.

These statements can obviously be magnified in regard to the chronic patient. Recent studies demonstrate that it is the very norms and expectancies communicated and allowed to persist that foster the spirit of chronicity—which has rightfully been attributed as an artifact of the hospital subculture. Dramatic changes, for example, have occurred in chronic wards with simple alterations in the norms. Once the general attitude "this is not expected here" has been effectively inculcated, problems of incontinence and combativeness have been removed or are negligible.

A similar process accounted for differences noted between two institutions in the same locale. According to Dr. Meyer Williams, Chicago, a patient, either mute or combative, admitted to one hospital would tend to remain so for long durations, while people with similar symptoms would relinquish this behavior within two weeks at the other institution. In our project behavior changes in the first few weeks can be related to the pressures of the ward personnel. Combativeness and incontinence, typical problems with the same patients in their original settings, have been almost eliminated in a relatively short period of time.

Economy of Approach

Invariably the issue of treatment reverts back to the problem of personnel, the usual reaction being that more psychiatrists and physicians, psychologists, social workers, and adjunctive therapists are needed for a better therapeutic regimen. A program which adds considerable professional personnel is indeed expensive. Results of such programs, though sufficiently positive on the surface, are still open to scrutiny. It does not logically follow, however, that optimal treatment programming must be delayed because of the shortage of staff. The onus is on those who are available, and the issue viewed positively can be stated: What can be done where there is a dearth of professional personnel?

Too often a general therapeutic distinction is made between the treatment received by patients from members of the professional staff in contrast to patient-aide relationships. Though the vital contribution of nursing personnel in therapy of the patient is gaining recognition informally, there is little official admission of their therapeutic role. The hier-

archy of roles and problems involved in the conception of therapy was given considerable attention in the Research Conference at Boston in 1954.[7] Chapter 10 discusses in detail the specific issues relevant to nursing personnel. Despite the fact that nursing personnel spend considerably more time with the patients than the average therapist, there has been a fairly uniform lack of demand made upon them to take an active interpersonal part in patient treatment.

Perhaps a few words about the role of psychotherapy in an institutional setting are also of relevance, The value of psychotherapy as a treatment tool seems to rise in stature as other techniques do not accomplish the desired goals. Contrary to the relegation of therapeutic efficiency to nursing personnel, psychotherapy is maintained as the ideal and those possessing this skill are highly sought after. In the hospital situation, and there is no likelihood of this ever changing, psychotherapy is a grossly uneconomical procedure. It is a "luxury" for those fortunate enough to receive this treatment and a learning experience for those who administer it.

A compromise solution was offered in a suggestion that a therapeutic procedure would be most economical if the natural resource of the hospital, the psychiatric aide, were employed for treatment of the patient. Secondly, we hypothesized that an efficient program could be effected if the personnel were systematically presented with the key principles in the psychopathology and therapy of schizophrenics and the operation of group processes and communication.

Concepts of Treatment

Existing procedures in the treatment of schizophrenic patients lack theoretical consistency. There is a limited rationale for the methods used, the major justification being that they have immediate practical application. This emphasis on empirical approaches leads to a random process of elimination and the utilization of methods which seem to have little relationship to what is known about the process of mental illness. For instance, the abundant use of somatic and drug therapies has, to date, no reliable foundations in biological concepts of mental disorders.

More significant, perhaps, is the failure of the mental institution in its present form to foster stable personal concepts. A system which accentuates the shift from one activity to another, and one therapist to the next, allows little room for a consistent frame of reference. Yet, one of the most agreed upon criteria of a mental disorder is the patient's unpredictability. How does one learn then to generalize in an atmosphere which exposes the individual to a constantly fluctuating world? Since stability of communication patterns can be controlled only in a continuous interpersonal process with a given length of time for interaction, it was proposed that the group of patients be assigned to one person only (practically, this means two people a day), remaining together from waking to sleep, participating as one unit in all activities.

Another consideration in the development of our thinking was to advance a broad working operation of treatment which would embrace a coherent theoretical orientation. Rehabilitation, conceived here, is a total process aimed at restoring the individual to society within the fullest limits of his potentialities. In contrast to the largely empirical methods employed, it is our intent to attack the disability itself, attempting to improve the condition of disorganization along preconceived notions. Such a procedure purports to alter the patient's behavior drastically in order that he will be able to cope successfully with the stresses of daily living.

We assumed it is possible to conceptualize the behavior characterized by schizophrenia in psychological terms. Therefore, the alteration of schizophrenic behavior can take place through an interpersonal process. The direction of treatment is determined by what is presumed to be the focal point of the disorder.

Experimental Procedure

Our aim is to determine whether a new treatment approach can yield more profound results than existing empirical methods. The experiment was designed so that three different treatments could be comparatively evaluated: theoretical treatment, total push treatment, and a control treatment program.

Thirty female schizophrenic patients were selected from chronic wards and divided at random into three groups, each group of ten patients receiving a distinct therapeutic method. The patients reside on one ward and will remain there for six months, the duration of the project. Psychological instruments were administered before the introduction of treament and will be given again at defined stages.

The subjects, all diagnosed as schizophrenic, are, on the average, 38 years old and have remained continuously at the hospital for about 12 years. Their mean age at last admission was approximately 26, and they have received 11 years of education. The patients, on the whole, can be considered as regressed, though there is marked variation in the level of organized behavior. When chosen they were described as withdrawn, uncooperative, assaultive, combative, and unresponsive. Seclusion, heavy drug dosages, and electric shock were used as the main methods of treatment and control.

Theoretical Treatment Program*

Theory. In brief, the formulation employed is closely allied with recent psychoanalytic ego psychology. It assumes that cognizance of reality is altered because of diminished or complete loss of awareness in the schizophrenic of both bodily and conceptual processes. It is this lack of differentiation (disruption in ego boundaries) which prevents the schizophrenic from distinguishing himself and the outside, the real from the unreal.

Because of the loss of awareness of themselves—the absence of a stable internal reference point—schizophrenics have reduced sensitivity to affects, feelings, and sensations of bodily processes as well as thoughts, ideas, and other mental activity. An example of the lack of awareness of both outer and internal sensations in a patient is described by Staveren[17] during a therapeutic session:

"The patient put a cigarette between her lips and held a match in her hand, about to light it. I struck a match and lit the cigarette for her, and she took a few puffs, and then proceeded to light her own match and relight the cigarette. I asked her to take time out and observe for a moment what had gone on. We were able to establish that though her senses had responded to my lighting her cigarette, there seemed to be no representation of that fact or of my person in her awareness. This made it possible for her to light the cigarette again herself, as if nothing had gone before. She summed this up by saying: 'So, I'm talking out loud to myself rather than to you.' "

Therapeutically, to aid schizophrenics in regaining lost ego boundaries, in experiencing themselves as independent persons with realistic identities of their own, there must be an intrusion into the schizophrenic's world. The encroachment upon the psychotic process is achieved through a constant attending, making him aware of himself: that is, his bodily processes, actions, communications, effects of others on him, and his effects upon others. As Scher[14] states, ". . . in obtruding into the world of the patient, one must make him aware of his own reponses, such as scratching or masturbating, in order that he may again begin to attend to stimuli of pain and other feelings from his own body, as a meaningful and significant source."

Aides and Program. A number of select aides were allocated for the project. Consultation sessions were held prior to the starting date to acquaint the personnel with the theoretical background of the research and the methods to be utilized. Four aides have been assigned to the group, two responsible for the morning and afternoon shifts and the other two as their reliefs.

Training sessions are held each week and contact is made daily with each aide on the ward. These meetings are held to discuss programming, methods, and special problems and to evaluate progress. The aide spends her complete time with the group, the exceptions being for meals and a period to write up notes. When with the group, she is in complete command of the patients; no one is available to help or advise her.

Nursing personnel thus become crucial figures in the treatment program. Rather than rigidly structuring the milieu through excessive limit-setting or permissiveness—in either case a growth deterrent—her attitude is that of an understanding person functioning within an external set of communal rules which serve as a guide for the group. She also allows each individual patient latitude for development in independent responsibility and decision-making.

The aide is the reality reference for the patient and she must continually interrupt the individual psychosis in order to structure the patients' world and orient their behavior into meaningful, organized, and goal-directed channels. She intrudes into the lives of the group, promoting affective involvement through natural and spontaneous reactions to the patients.

Throughout the day the aide repeatedly "forces" her presence into the interaction, directing all members to be aware of themselves and the other people involved. She may aim attention on the inertia of those not participating, point out over-enthusiasm, or even identify with complainers if their comments are perceived by her as realistic. In all instances she guides behavior toward reality in conjunction with group norms.

A rigorously devised full activity program for the group is not necessary, but it is essential that the patients remain together in anything they initiate. Particular activity is de-emphasized for the immediate needs of the patients, the activity being only a means for establishing a unitary interactional event which enables the aide to enter the situation and maximize her presence therapeutically.

Finally, she endeavors to strengthen adjustive behavior through praise, encouragement, and support and discourage either subtly or directly behavior which is maladaptive. She will deter bizarre behavior, peculiar verbalizations, and ideas, directing the patient's energies elsewhere through centering attention on reality perceptions.

Total Push Group

The second group of ten patients has been placed in an intensive "push" program. During their waking periods a philosophy of activation and socialization is

* The writer is indebted to Dr. John Cumming, Dr. Austin Des Lauriers and Dr. Jordan Scher for their aid and contributions to the ideas expressed in the theoretical treatment program.

stressed. Such a rigorously devised schedule is designed to interfere in the withdrawal and apathy of the chronic schizophrenic, geared to re-build lost habit and normative behavior patterns. The patients are involved in every phase of activity therapy, evening social affairs and regular group therapy sessions.

Control Treatment Group

The control group program follows the usual hospital procedure, consisting of the therapeutic prescription plan suggested by the ward psychiatrist. Treatment is based on the patient's needs and the goals developed by a staff team which has discussed diagnoses, treatment, and planning implications.

Evaluation Techniques

A number of instruments have been utilized to measure whether any differences will occur under these methods. Evaluations will be made before, during, and at the conclusion of treatment. Among the dimensions of behavior being measured are: ward adjustment; clinical symptomatology; intellectual efficiency; perceptual behavior; conceptual behavior; and self concept. A final measure will be follow-up appraisals of the patients at post-treatment intervals of 6 and 18 months.

Conclusion

We have attempted, in condensed fashion, to describe some major weaknesses inherent within the mental hospital structure. In contrast to the usual practical treatments employed, an alternate method based on social psychological theory has been proposed. This formulation isolates common elements in the psychopathology of schizophrenia and makes the assumption that the primary communicative disorder is due, in large measure, to the patient's lack of awareness of his own person as a reference point. As a consequence, a therapeutic strategy has been conceptualized emphasizing the stability of patient grouping, maximal use of norm processes, and employing nursing personnel as primary treatment agents in a continuous and active intrusion into the patient's world.

It is our purpose to demonstrate that a hospital program based on these particular theoretical assumptions will be more effective and economical than programs of largely empirical methods. In addition, it is hypothesized that such a method of intrusion, based firmly in social psychological theory, can be transmitted to relatively untrained staff members who can effect profound personality changes in schizophrenic patients.

Though it is too early to report on specific findings, preliminary changes have led us to think optimistically of the outcome. Alterations in group norms are manifest in overall qualitative impressions of patient behavior. Most dramatic has been reduction of combativeness, untidiness, and the amount of seclusion time. Another event of interest is that these patients, who had seemingly lost interest in themselves and the outside world, spontaneously initiated as their first project a comprehensive plan for living and personal care.

References

1. Bateson, G.: A theory of play and fantasy, Psychiatric Research Reports 2, 39-51, 1956.
2. Cumming, J., and Cumming, E.: Social equilibrium and social change in the large mental hospital. In M. Greenblatt, D. J. Levinson and R. H. Williams (Eds.): The Patient and the Mental Hospital. Glencoe, Illinois: The Free Press, 49-72, 1957.
3. Des Lauriers, A. M.: Development of the sense of reality in schizophrenic children: a contribution to the study of the structural aspects of schizophrenia. Research Project M-775(C), Progress report covering period September 15, 1954 to September 15, 1955. Unpublished (mimeo), Topeka, Kansas.
4. Federn, P.: Ego Psychology and the Psychoses. New York: Basic Books, 1952.
5. Galioni, E.; Adams, F., and Tallman, F.: Intensive treatment of back-ward patients, American Journal of Psychiatry 109, 576-583, 1953.
6. Greenblatt, M.; York, R.; Brown, E. L., and Hyde, R.: From Custodial to Therapeutic Patient Care in Mental Hospitals. New York; Russel Sage Foundation, 1955.
7. Greenblatt, M.; Levinson, D. J., and Williams, R. H. (Eds.): The Patient and the Mental Hospital. Glencoe, Illinois: The Free Press, 1957.
8. Jones, M.: The concept of a therapeutic community, Amer. J. Psychiat. 112, 647-650, 1956.
9. Kramer, M.: Problems of research on the population dynamics and therapeutic effectiveness of mental hospitals. In M. Greenblatt, D. J. Levinson, and R. H. Williams (Eds.): The Patient and the Mental Hospital. Glencoe, Ill.: The Free Press, 145-169, 1957.
10. Miller, D., and Clancy, J.: An approach to the social rehabilitation of chronic psychotic patients, Psychiatry 15, 435-443, 1952.
11. Rapaport, D. (Ed.): Organization and Pathology of Thought. New York: Columbia University Press, 1954.
12. Scher, J. M.: Schizophrenia and task orientation: the structured ward setting, A.M.A. Arch. Neurol. Psychiat. 78, 531-537, 1957.
13. Scher, J. M.: The decision-making process, limit and channel setting in schizophrenia: communication and structure in the therapeutic process. Paper read at annual meeting of American Psychiatric Association, Chicago, 1957.
14. Scher, J. M.: Perception: equivalence, avoidance and intrusion in schizophrenia. A.M.A. Arch. Neurol. Psychiat. 77, 210-217, 1957.
15. Sines, J.; Lucers, R., and Kamman, G.: A state hospital total push program for regressed schizophrenics, J. Clin. Psychol. 8, 189-193, 1952.
16. Stanton, A. H., and Schwartz, M. S.: The Mental Hospital. New York: Basic Books, 1954.
17. Staveren, H.: Suggested specificity of certain dynamics in a case of schizophrenia. In P. Mullahy (Ed.): A Study of Interpersonal Relations. New York: Hermitage Press, 455-470, 1950.
18. Von Mering, O., and King, S. H.: Remotivating the Mental Patient. New York: Russel Sage Foundation, 1957.
19. Weinshel, E. M.: The psychotherapeutic aspects of schizophrenia, J. Nerv. Ment. Dis. 115, 471-488, 1952.
20. Whitaker, C. A.: Preverbal aspects of psychotherapy with schizophrenic patients, A.M.A. Arch. Neurol. Psychiat. 67, 834-837, 1952.

PRESIDENT'S PAGE

DEAR DOCTOR:

Please indulge a bit of philosophy at the close of what has been, for me, a most happy year as your president. This has to do with The 5th Dimension.

In a world of hydrogen bombs and interplanetary rockets, and telescopes that reach out a billion light years into space (and thus also a billion years back in time), mankind sometimes regards himself as a forlorn and tragic actor, trapped, without his will, in the cosmic clockwork of creation.

To the familiar concept of a 3-dimensional universe has been added the 4th dimension of Time. (Every real event occurs at a point in time, as well as space.) However, there is a 5th dimension of reality that is just as obvious, but that is usually disregarded. This is the human factor in all experience and all knowledge.

Men think they see the universe of atoms and stars, of physics and chemistry and mathematics, as something outside of themselves. Mankind then appears as a bit of fungus that has occurred by chance on a tiny sphere of air and rock and water, attached to a very ordinary star, lost among billions of stars, in a galaxy lost among billions of galaxies.

This is an illusion. There can be, for man, no reality except as he (or others of his fellows) experiences that reality. This human experience is a part of every observation—of every conclusion that man can make concerning the nature of the universe. It is the spirit of man, his mind and his soul, that dissects the atom and learns to release its awful power. It is his spirit that gazes through the telescope into the depths of space—that sits in judgment on every conclusion of the philosopher. This is the divine mystery. The human soul is real—just as real as any of the data it accumulates about the universe.

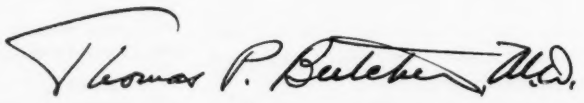
And because the spirit of man is real, there is, by that very fact, spirit in the universe. This is the 5th dimension of reality. It is man's faith in his experience of that reality. It breathes emotions and values into the cosmos.

Without this ingredient of man's faith in his studies, science ceases. This human factor, this spiritual quality in all experience, makes this a spiritual universe in which we live—we can have absolutely no knowledge of anything else. There is no reality that does not have this 5th dimension, this subjective factor of the yearning, living soul of man.

Deny this 5th dimension and man is wracked, naked and alone, a helpless bit of protoplasm on the senseless Wheel of Time, a bitter victim of a grim, cosmic jest.

Affirm it, and man stands proudly on the threshold of the future—courageously—gloriously—truly a living soul in a living universe!

Sincerely,



An Invitation to the Doctors of Kansas

The Shawnee County Medical Society cordially invites all members of the Kansas Medical Society and neighboring areas to attend the Centennial meeting of the Kansas Medical Society in Topeka.

As the Kansas Medical Society celebrates its 100th birthday and 100 years of service by the doctors of Kansas to its citizens, this annual meeting will be the largest and most elaborate ever planned by your state Society.

C. W. Bowen, M.D., President
Shawnee County Medical Society

Program for Monday, May 4, 1959

Topeka Fairgrounds, 17th and Topeka Blvd.

"MEDICAL FRONTIERS"

7:30 Breakfast, House of Delegates, Florentine Room, Jayhawk Hotel

9:30 Exhibits Open
Fairgrounds, 17th & Topeka Blvd.

FIRST GENERAL SESSION

10:00 "CHANGING ASPECTS OF MEDICAL EDUCATION"

10:00 FUTURE TRENDS IN MEDICAL EDUCATION

William R. Willard, M.D., Vice President, University of Kentucky, Lexington, Ky.

10:50 FUTURE OF FINANCING MEDICAL EDUCATION

Ward Darley, M.D., Executive Director, Association of American Medical Colleges, Evanston, Ill.

11:40 Intermission to Visit Exhibits

12:00 Luncheon, Social Hour

SECOND GENERAL SESSION

1:30 THE EDUCATION OF A PHYSICIAN

Karl A. Menninger, M.D., Chief of Staff, The Menninger Clinic, Topeka, Kans.

2:30 PANEL ON THE SUBJECTS OF THE DAY

Franklin D. Murphy, M.D., Chancellor, University of Kansas, Lawrence, *Moderator*

Ward Darley, M.D., Evanston, Ill.

Mahlon H. Delp, M.D., Kansas City, Kans.

Karl A. Menninger, M.D., Topeka, Kans.

Wm. R. Willard, M.D., Lexington, Ky.

4:00 Exhibit Hall Will Be Open

7:00 Dinner

Kansas Academy of General Practice

KANSAS MEDICAL GOLF AND SKEET ASSOCIATION

Golf, Shawnee Country Club
Skeet, Topeka Gun Club

6:30 Social Hour

Shawnee Country Club

7:30 Dinner

Shawnee Country Club

Program for Tuesday, May 5, 1959

Topeka Fairgrounds, 17th and Topeka Blvd.

9:30 Exhibit Hall Open—Registration

10:00 The Role of Government in Medicine

Elliott L. Richardson, Assistant Secretary, Department of Health, Education and Welfare, Washington, D. C.

10:50 The Future of Medicine and Labor

William A. Sawyer, M.D., Consultant for International Association of Machinists, Rochester, New York

11:40 Exhibit Hall Open

12:00 Luncheon, Social Hour

1:30 The Future of Health Insurance

James A. Stuart, M.D., Executive Vice-President, The National Blue Cross Association, Inc., Rochester, New York

2:20 Panel on Topics of the Day

E. Vincent Askey, M.D., Speaker, House of Delegates of the American Medical Association, Los Angeles, Calif., *Moderator*

Panel Members:

Elliott L. Richardson, Washington, D. C.

William A. Sawyer, M.D., Rochester, N. Y.

James E. Stuart, New York City, N. Y.

4:00 Exhibit Hall Open

7:00 Annual Banquet and Dance, Topeka Country Club

Program for Eye, Ear, Nose and Throat Section

Tuesday, May 5, 1959
Topeka Fairgrounds, 17th and Topeka Blvd.

9:30 Symposium on Glaucoma

Earl G. Padfield, M.D., Kansas City, Missouri, *Moderator*

Panel Members:

George F. Gsell, M.D., Wichita

Max S. Lake, M.D., Salina

Wm. M. Scales, M.D., Hutchinson

12:00 Luncheon, Social Hour

1:30 Report on Glaucoma Survey
Business Meeting

4:00 Adjournment

Program for Wednesday, May 6, 1959

Topeka Fairgrounds, 17th and Topeka Blvd.

8:30 Registration—Exhibits Open

9:00 AUTOMOTIVE SAFETY

Donald J. Schrum, Body Experimental Engineer, Studebaker-Packard Corp., *Moderator*

DEVELOPMENT AND EVALUATION OF VEHICLE SAFETY FEATURES; HUMAN ENGINEERING RESEARCH AND TRAFFIC PATTERN STUDIES AS RELATED TO ACCIDENT PREVENTION

Robert H. Fredericks, Supervisor, Crash Safety Unit, Ford Motor Company

DEVELOPMENTS IN SAFETY TESTING TECHNIQUES

Howard K. Gandelot, Engineer-in-Charge, Vehicle Safety Section, General Motors Corporation

VEHICLE CRASH TESTING TECHNIQUES AND INSTRUMENTATION

Larry H. Nagler, Administrative Engineer, American Motors Corporation

QUESTIONS AND ANSWERS

12:00 Adjournment

12:15 House of Delegates Luncheon, Jayhawk Hotel

Woman's Auxiliary to the Kansas Medical Society, Annual Meeting

May 4-6, 1959, Topeka, Kansas

Monday, May 4

9:00-4:00 Registration, Convention Headquarters, Exhibit Hall, Fair Grounds (18th and Topeka Blvd. Entrance)

12:00-2:00 Welcoming Salad Bar, Hospitality Room, In Honor of State Officers (Complimentary), Exhibit Hall, Fair Grounds

12:00 Past State Presidents' Luncheon, Holiday Inn Dining Room, 3820 Topeka Blvd.

2:30-4:30 Pre-Convention Board Meeting, Exhibit Hall, Fair Grounds

6:00 Social Hour, Jayhawk Hotel

6:30 General Practitioners' Banquet, Jayhawk Hotel, 7th and Jackson

Speaker, Rabbi Ferdinand M. Isserman, St. Louis, Missouri, "Many Races, One Humanity; Many Nations, One World; Many Religions, One God."

All Doctors and Wives Invited

Tuesday, May 5

9:00-4:00 Registration, Exhibit Hall, Fair Grounds

9:00 General Session, Exhibit Hall, Fair Grounds, Changing of the Guard

11:00 "Coffee Break"

1:00 Luncheon (Honoring Special Guests), Shawnee Country Club, 913 East Dudley Road—Program, "Moon Madness," Ticket $3.00

7:00 President's Dinner and Ball, Topeka Country Club, 2700 Buchanan

Everyone Invited

Wednesday, May 6

9:00-12:00 Registration, Exhibit Hall, Fair Grounds

9:00 Post-Convention Board Meeting, Exhibit Hall, Fair Grounds

10:00 Safety on the Highway, General Assembly Room, Fair Grounds—All Auxiliary members are invited to attend this meeting of the Kansas Medical Society.

11:00 Brunch, Topeka Country Club, 2700 Buchanan, Ticket $3.00

Kansas Academy of General Practice

Annual Assembly (Three Hours Category I)
Jayhawk Hotel, May 4, 1959, Topeka, Kansas

8:00 Registration, Florentine Room

9:00 "Office Ophthalmology and the Busy Practitioner"
Malcolm A. McCannel, M.D., Minneapolis, Minn.

9:50 Intermission

10:00 "Office Management of the Proctologic Patient"
George H. Thiele, M.D., Kansas City, Mo.

10:50 Intermission

11:00 "Question and Answer Period"
Floyd C. Beelman, M.D., Topeka, *Moderator*
Malcolm A. McCannel, M.D.
George H. Thiele, M.D.

12:00 Luncheon and Business Meeting
Floyd E. Dillenbeck, M.D., *Presiding*
President, Kansas Chapter of AAGP

A Real "Dutch Lunch." Don't Miss It!

6:30 Cocktail Hour, Roof Garden, Jayhawk Hotel

7:00 Dinner

8:00 "Many Races, One Humanity; Many Nations, One World; Many Religions, One God"

Rabbi Ferdinand M. Isserman, St. Louis, Missouri

Hosts for the Meeting

Topeka Physicians Planning the Centennial Meeting

GENERAL CHAIRMAN—FRANCIS T. COLLINS, M.D.

Program

Nathaniel Uhr, M.D.
Newman V. Treger, M.D.
Richard C. Tozer, M.D.

Arrangements

Richard R. Beach, M.D.

Scientific Exhibits

Chester M. Lessenden, Jr., M.D.
Samuel Zelman, M.D.
Homer L. Hiebert, M.D.
Abraham A. Fink, M.D.

Auxiliary

R. Dale Dickson, M.D.

Press

Floyd C. Beelman, M.D.
David E. Gray, M.D.
Willis L. Beller, M.D.
Oscar S. Proctor, M.D.
Vernon C. Wiksten, M.D.

Public Exhibits

Lucien R. Pyle, M.D.
John L. Lattimore, M.D.
John A. Segerson, M.D.
Rudolph Chess, M.D.

History

Orville R. Clark, M.D.

Hosts

D. Bernard Foster, M.D.
John E. Crary, M.D.
Harry J. Davis, M.D.

Commercial Exhibits

Benson M. Powell, II, M.D.

Chairman, K.M.S. Centennial Committee

Charles S. Joss, M.D.

Councilor Reports

Activities in the Different Geographical Districts of the State

First District

The past year has been a rather peaceful, quiet one, though not uneventful, for district one.

There have been no major problems of medical ethics. Nor have there been major problems between the various branches of the healing arts.

A new cancer detection center is in operation at the Winchester Hospital.

Cushing Memorial Hospital at Leavenworth is undergoing a complete revamping and building program which will result in an addition of 80 patient beds. All patient rooms will be new, with the old part of the building used for ancillary services. Atchison and Leavenworth counties have combined to obtain the services of a full-time radiologist.

Emerson Yoder, M.D., *Councilor*

Second District

The Wyandotte County Medical Society, which represents the entire district, reports no major problems during the past year. Our society is now operating under a new constitution which is so up to date that it has not yet gone to the printers. It has been quite ably drawn up by the Constitution Committee headed by Past President O. W. Davidson. Many new committees and changes are provided by this new document.

A few of our members have passed on to their final rest. Among others was Past President George M. Gray in the 103rd year of his life. His influence in the practice of medicine in this community will long be felt.

This district feels it a distinct honor that one of our members, the most able Glenn R. Peters, has been the choice of the Kansas Medical Society to start off our second century of existence.

J. Warren Manley, M.D., *Councilor*

Third District

During the past year I have met with every medical society in the district to become better acquainted with and more aware of the problems that they might have that involve the Kansas Medical Society.

It has been with pleasure that I have been cordially received and have renewed many acquaintances every place I went. Because of this I feel that I can better serve the physicians of this district.

G. R. Maser, M.D., *Councilor*

Fourth District

The component societies of the fourth district have functioned very much as they have in the past and no unusual problems have arisen.

The Southeastern Kansas Medical Society meets quarterly on a rotating basis with the county medical societies. These meetings have been well attended. The programs were well planned and educational. It is gratifying to note the increasing interest of the members of the fourth district in the extension courses and the postgraduate work at the Medical Center.

The members of the fourth district wish to express their appreciation to the medical auxiliaries for their efforts in organizing the nurses recruitment programs and the related sponsoring program.

Your councilor wishes to urge all members to contibute to A.M.E.F.

Dick B. McKee, M.D., *Councilor*

Fifth District

The county societies in the Fifth District presented no problems or requests for action on the part of their councilor during the past year.

The attendance at postgraduate circuit courses by members of this district has been good. Improvement in hospital facilities has been assured with the groundbreaking ceremonies in Manhattan for a new 100-bed Saint Mary Hospital. Interest in the activities of our state society and its centennial meeting in May is expressed throughout the district.

Ralph G. Ball, M.D., *Councilor*

Sixth District

In reviewing the activities of the society for 1958, I find that our active membership is the same as last year, which was 150. Fellowship membership remains the same, that is 4. Emeritus membership now totals 10, associate membership—9, and resident membership—1. Death claimed Drs. Emerson, Mills, Morris and Reed.

Members again assessed themselves $15 for American Medical Education Foundation and $5 for Science Fair.

The third and final polio clinic was held in August. Approximately 4,000 persons were inoculated, mostly for their third polio vaccination.

The Science Education Committee organized a

science institute in cooperation with several other groups which was attended by approximately 100 junior and high school students.

For the first time the Medical Society met in a joint meeting with the Auxiliary which proved to be so popular that it will be repeated each year.

Since Shawnee County Medical Society will be host for the state meeting, many meetings have been necessary to help plan the program.

The Rural Health Committee in cooperation with the local extension office devised and sent to approximately 4,000 families, questionnaires on various phases of health and the part the Medical Society could take in their health program. In October the first county-wide meeting was held at which some 600 farm women were present for the program on cancer.

We had, of course, our regular scientific programs which included both scientific and medical-legal subjects.

I am sure other things happened during the year, but these seem to be the ones which took most of our time and attention.

James A. McClure, M.D., *Councilor*

Seventh District

Only minor problems have arisen in the Seventh District during the past year. These have been or will be resolved at the local level. The unification of smaller societies within the district has not yet been accomplished, but is still under consideration.

Interprofessional relations have been harmonious. Quality and quantity of medical care have been more than adequate.

The members of the Lyon County Medical Society have willingly contributed time and effort and some financial sacrifice to the Lyon County Experiment. This program, under Blue Shield and Blue Cross auspices, is an investigation of the cost of furnishing prepaid service benefits, constituting medical and surgical care, visiting nurse service, laboratory and x-ray studies, hospital care, and partial drug coverage to citizens who are 65 years of age and older.

The spirit, interest, and cooperation of Kansas Medical Society members in District Seven have been excellent.

Edward J. Ryan, M.D., *Councilor*

Eighth District

All of the component societies have been functioning in a satisfactory manner. We have had a couple of major problems which have been brought to the attention of the councilor. These have been handled nicely at their origin.

An Eighth District meeting was held at Arkansas City in February with an excellent attendance. Only one county failed to show. The Twelfth District sent two representatives to this meeting. Our president, Dr. Thomas P. Butcher, was present along with Dr. Edward J. Ryan, president of Blue Shield, who served as moderator. Dr. Robert Purvis and Dr. James Fisher, board members, were present, along with Mr. Sam Barham and Mr. Tom Reed of Blue Cross-Blue Shield. The Relative Value Fee Schedule, Blue Shield fees, indigent care, and legislative matters were discussed.

The interest of members of this district in postgraduate work, both at the Medical Center and circuit courses, has been very gratifying. Our circuit course has experienced the best attendance in years, with many doctors attending from the neighboring counties in Oklahoma.

A tetanus clinic was held in Winfield in February, at which over 500 persons received their first, second, or booster shot. This clinic was set up to tie in with a disaster scheduled for that city in March.

May I again urge you to send in those contributions to the American Medical Education Fund and designate the school to which you wish it to go.

I wish to thank all members of the Eighth District for their cooperation in furthering the interests of the Kansas Medical Society. It has been a real pleasure to serve you.

James E. Hill, M.D., *Councilor*

Ninth District

This has again been a quiet year in the Ninth District. This councilor has again attended all councilor meetings and has endeavored to represent the district as well as possible in all matters. The majority opinion of the Saline County Medical Society, being the largest society within the district, has been carefully evaluated in order to help determine any policies necessary in voting at the council meeting.

It is also the pleasure of this councilor to announce that the Saline County Medical Society has voted an extra assessment in future years which will make the collection job much easier.

It is to be hoped that the district will be well represented at the centennial in Topeka in 1959.

L. S. Nelson, Jr., M.D., *Councilor*

Tenth District

Medical matters have proceeded smoothly in the tenth district this year. There have been no major crises or catastrophes. The indigent care problem appeared to grow for a while—however, that now seems to be largely a Social Welfare headache.

Attendance at circuit courses and other postgrad-

uate activities has been good. Generally, the caliber of local medical society meetings has been high.

By and large professional relationships within the tenth district have been good. At present, I see no reason why this may not continue, as this seems to be the general rule over the state.

The tenth district councilor plans to visit the counties throughout this district. Since I have been councilor for only a short time, this has not been possible.

John N. Blank, M.D., *Councilor*

Eleventh District

The Eleventh District has had a very successful year. The Sedgwick County Medical Society's programs have been outstanding with excellent speakers of national renown appearing. The program, as in the past, produced an information series of meetings and deserves a sincere expression of appreciation.

The Science Fair will again be held, being sponsored jointly by the Sedgwick County Medical Society and Wichita University. At this writing approximately 200 exhibits of intermediate and high school age students have been registered. This is a fine public relations movement for both organized medicine and science in our district.

Business-Education Day, an annual event, will be held again in 1959. This is an opportunity for the teachers in our schools to visit doctors' offices and see private enterprise in action. The hospitals of the city also cooperate in this activity which is deemed one of the best public relations programs of our society.

The annual Midwest Cancer Conference was again held this year with the usual outstanding panel of guest speakers. This annual meeting has become a tradition in Wichita and, despite occasional lapses in the weather, attendance has continued to increase from year to year. We sincerely hope that our colleagues will continue to support and attend this excellent meeting.

The Sedgwick County Medical Society, in cooperation with one of the local television stations (KARD-TV), has continued to present its regular monthly television program "Your Doctor Speaks." This has met with excellent response from the public. A variety of subjects have been covered from the aspects of the various types of medical practice to discussions of socio-economical problems.

Wichita was honored on March 5, 6 and 7, 1959, to be host to the National Rural Health Conference of the American Medical Association. This program was a great success and was well attended by representatives from the entire United States. We were honored to have Dr. Louis Orr, Orlando, Florida, president-elect of the American Medical Association, in Wichita to attend the meeting. Dr. Orr made several public appearances as well as participating in the program. Many other notable speakers also attended. The president of the Woman's Auxiliary to the American Medical Association, Mrs. Arthur Underwood, attended the meeting and participated.

Our medical auxiliary had a successful year. One of their finest programs was a meeting on medical memoirs. An 1890 doctor's office was set up in the Medical Society Building and a large collection of medical memorabilia was collected. The ladies dressed in gay nineties costumes and gave a most interesting program which was both historical and informative. The Auxiliary is sponsoring a group of young girls in its very active and successful Future Nurses Club. These girls will visit the University of Kansas Medical Center and the Topeka State Hospital as part of the program to interest girls in this field of medicine.

We also wish to thank the doctors who have continued to aid us in presenting material in our various high schools on Career Day.

Public relations during the year have been satisfactory, and we feel that our community acceptance is on a very high level at this time. There have been no great problems in this field of public relations.

This councilor also wishes to give his appreciation to all who have cooperated during the past year.

William J. Reals, M.D., *Councilor*

Twelfth District

All affairs of the medical societies in the Twelfth District have run very smoothly this past year. The present year, being the centennial of the Kansas Medical Society, has been looked forward to and several special functions have been planned.

One of the most enlightening and enjoyable occasions in the recent past was the visit of President Butcher and Oliver Ebel to the South Central Tri-County Medical Society. At this visit 50-year pins were awarded to the following seven men: Dr. H. L. Cobean, Dr. M. B. Flowers, Dr. A. R. Hatcher, Dr. D. E. Kisecker, Dr. C. H. Lockwood, Dr. W. H. Neel, and Dr. G. M. Wooden.

AMEF funds were bolstered from this district by 100 per cent contribution of the members. The Auxiliary also contributed to AMEF, one portion of it being in memory of Dr. R. T. Unruh.

The April meeting of the Tri-County Society will be devoted as usual to the medical school, and this is always an enjoyable association. During the remainder of the year other functions by the society and the auxiliaries will help to further commemorate this centennial year.

Albert C. Hatcher, M.D., *Councilor*

Thirteenth District

Medicine has pursued an even course in this district the past year. So far as visited, the component societies were functioning well. The number of new physicians was apparently at about the normal number.

H. St. C. O'Donnell, M.D., *Councilor*

Fifteenth District

The only report I have to make is that everything in the fifteenth district is very stable (that does not denote that we are horsing around). The "status quo" is static. There have been no changes in doctors and although the lack of spectacular progress is a fact, we have not lost ground. There is no news of significance and we are all happy to see general improvement in the area.

L. G. Glenn, M.D., *Councilor*

Sixteenth District

Go west, young doctor, go west—and settle down in a small town. This is as a tribute to our oldest honorary member of the Northwest Medical Society. Dr. Henry O. Hardesty passed away a few days ago, just under 89 years of age.

His Kansas license, No. 71, and narcotic license, No. 694, are landmarks to a medical pioneer who came to Jennings, Kansas, in 1901. He was one of the three charter members of the Norton-Decatur County Medical Society, later extending into the Northwest Kansas Medical Society.

He is a replica of the original country doctor who never took care of a patient in a hospital. If the modern country doctor, with his extensive training and education and modern facilities, could only retain the human interest for the personal and financial welfare of the patient, and follow the Golden Rule more closely, there would never be cause for the welfare state now on the horizon.

Our 43 members are showing good attendance at the postgraduate meetings. I have several requests for doctor locations in our district and hope to make contact with some ambitious graduates. The fact that two physicians, now at ages past 80, practiced in Jennings for over 50 years should be incentive for someone looking for a healthful practice and longevity.

Edward F. Steichen, M.D., *Councilor*

Seventeenth District

The medical situation during the past year has been very satisfactory. The area seems to be well covered although in several areas other doctors could be placed.

The hospital situation is being taken care of adequately. In Garden City a large new addition is under construction at St. Catherines Hospital. In Dighton a new hospital has been completed but as yet has not been opened. Bonds for a new rest home have been voted in Scott County.

H. Preston Palmer, M.D., *Councilor*

Committee Reports

Activities of the Different Special Groups of the State

Anesthesiology

H. F. Spencer, Emporia, Chairman; H. J. Brown, Winfield; P. H. Lorhan, Kansas City; D. U. Loyd, Wichita; R. S. McKee, Leavenworth; W. O. Martin, Topeka; B. A. Nelson, Manhattan; M. E. Nunemaker, Hutchinson; R. T. Parmlee, Wichita; L. J. Ruzicka, Concordia; J. R. Sumner, Hutchinson; F. C. Taggart, Topeka; E. T. Wulff, Atchinson.

This committee held a meeting in Emporia on February 8, 1959. The following subjects were discussed:

1. *The Status of Anesthesia in the Small Hospital in Kansas.* A plea for better and more adequate anesthetic records was made. It was also hoped that more doctors in Kansas would avail themselves of short courses in anesthesia such as the postgraduate course offered at the University of Kansas Medical Center. Every effort to improve anesthetic service in all Kansas hospitals was to be made.

It was also recommended that all anesthetic accidents, complications, or difficulties, as well as deaths on the table or in the immediate postoperative period, be reported to this committee.

2. *Blue Shield Fees.* Dr. Brown gave a very adequate and complete report of the status of the anesthetic fee schedule in the various Blue Shield plans. He also gave a new and original plan for a more equable payment.

The committee went on record as protesting the

$7.50 and $12.50 schedule now in effect on the $3,000 Blue Shield contract.

3. *The Nurse Anesthetist* (discussed under three catagories):

a. Nurse anesthetist employed by an anesthesiologist and working under his direct supervision.

b. Nurse anesthetist employed by the hospital.

c. Free lance nurse anesthetist.

The ethical, legal and financial aspects were discussed. It was again pointed out that the practice of anesthesiology is a part of the practice of medicine and should be practiced by a duly qualified physician. The nurse should be responsible to a physician who personally advises and supervises her work.

4. *The Program of Obstetric Anesthesia.* The committee went on record as favoring the payment of obstetric anesthesia by Blue Shield. It was recommended that complete and detailed records be kept of all such anesthetics, comparable to those kept for major surgical procedures, also that obstetric anesthetic accidents and complications be reported to this committee.

5. *The State Meeting.* It was suggested that an anesthesiologist be considered as a guest speaker for the 1960 session.

Harold F. Spencer, M.D., *Chairman*

Blue Shield Relations

D. G. Laury, Ottawa, Chairman; A. W. Beahm, Great Bend; P. L. Beiderwell, Belleville; M. A. Brewer, Ulysses; E. W. Christmann, Wamego; J. H. Coffman, Oberlin; J. A. Dunagin, Topeka; H. M. Glover, Newton; W. A. Grosjean, Winfield; N. E. Hull, Hays; P. Irby, Fort Scott; M. V. Laing, Kansas City; J. L. McGovern, Wellington; J. H. McNickle, Ashland; J. L. Morgan, Emporia; R. T. Nichols, Hiawatha; H. R. Schmidt, Newton; C. M. White, Wichita.

Your Committee on Blue Shield Relations held two meetings during the year in addition to 34 district meetings, two in each Councilor District.

The work of this committee during the past year was devoted to two major projects:

1. A study of hospital utilization.
2. Consideration of:

(a) Statement of Purpose of Kansas Blue Shield.

(b) A higher income level Blue Shield service contract.

The first was initiated at the request of the Joint Committee on Medical Economics and Hospital Utilization (composed of two members each from the Kansas Medical Society, the Kansas Hospital Association, Kansas Blue Shield, and Kansas Blue Cross). This study consisted of a review of approximately 2,200 hospital cases by 110 hospital staff committees appointed through the District Relations Committees. Approximately 500 medical society members participated in this project. The results of this study are now being tabulated.

After consideration of the Statement of Purpose and higher income level plan, the committee submits the following resolution for consideration by the House of Delegates:

WHEREAS, there has been some confusion over the role that Kansas Blue Shield should play in our changing economy, and

WHEREAS, the Blue Shield Board of Directors seeks guidance from the Kansas Medical Society in drafting long range plans, and

WHEREAS, your Committee and the 17 District Committees have spent considerable time exploring this problem, therefore be it

Resolved, That this Committee recommends to the House of Delegates of the Kansas Medical Society that the following Statement of Purpose of Kansas Blue Shield be adopted:

The purpose of Kansas Blue Shield is to help preserve the voluntary system of medical care as a segment of the traditional free enterprise system of the United States of America. Blue Shield was initiated and is sponsored by the Kansas Medical Society to make certain that voluntary health protection be made available to all people of Kansas at reasonable and fair cost and further to conduct research in medical economics.

Explicitly, "Voluntary health protection"—shall mean a system of financing the cost of necessary services of physicians and other allied professional groups to the greatest extent practicable through prepayment.

"Reasonable and fair cost"—shall mean the establishment of fair payments for health services. Such payments shall be regarded as payment in full (that is, service benefits) for covered services to patients with incomes below the ceiling levels stated in Membership Agreements, and Blue Shield shall make available a Membership Agreement with an income ceiling under which approximately 75 per cent of the population might qualify for service benefits.

Inherent in the problem of maintaining fair payments for health services at reasonable cost to the public is the need to keep pace with the changing cost of living and the changing incomes of the people. It is therefore proposed that Blue Shield payments for health services and the income levels in the Membership Agreements will be reviewed periodically and appropriate adjustments made.

"Research"—shall mean a constant effort at research and experimentation in medical economics, health benefits, and enrollment methods. And be it further

Resolved, That in keeping with this purpose the House of Delegates authorize Blue Shield to market a service contract with income limits of $4,000 single and $6,000 family (Plan C) with payments to physicians as outlined in the Fee Committee resolution; and be it further

Resolved, That the chairman of this committee disseminate detailed explanatory information concerning this program to all Kansas Medical Society members prior to the House of Delegates meeting.

At the request of Blue Shield your committee has considered the problem of evaluating the phrase "necessary, customary, and reasonable" charges in connection with payments to physicians for "extended coverage" Blue Shield contracts. The committee passed the following resolution:

WHEREAS, The Blue Shield Executive Committee is legally responsible for determining whether charges for services under extended coverage contracts are necessary, customary, and reasonable," and

WHEREAS, Your committee feels that cases involving unusual fees should logically be handled through organized groups within the Kansas Medical Society and that such determination can best be adjudicated at the district level, therefore be it

Resolved, That the committee recommends to the House of Delegates that the District Blue Shield Relations Committees be designated as Adjudication Committees for reviewing unusual charges under the Blue Shield Extended Coverage contracts.

D. G. Laury, M.D., *Chairman*

CHILD WELFARE

T. C. Hurst, Wichita, Chairman; M. J. Blood, Wichita; R. D. Boles, Dodge City; M. S. Boyden, Lawrence; G. E. Burket, Jr., Kingman; W. H. Crouch, Topeka; D. R. Davis, Emporia; R. L. Dreher, Salina; F. A. Gans, Salina; G. F. Jordan, Wichita; H. P. Jubelt, Manhattan; W. F. McGuire, Wichita; E. A. Martin, Parsons; R. N. Shears, Hutchinson; T. E. Young, Winfield.

The Child Welfare Committee has met but once in this past year. The problems, programs, and studies that have previously absorbed the attention of the committee continue to do so. Inasmuch as the complexion of this group has changed but little in the past few years, a continuity of interest is maintained.

Dr. Mary Boyden and her subcommittee are in the process of preparing a recommendation relative to the more efficient use of the rehabilitation program at Parsons as a further step in their study of the problem of the physically and mentally handicapped children of Kansas.

Both Dr. William Crouch and Dr. Hilbert P. Jubelt have been actively engaged in the formation of the State School Health Council, and as physician members will expend their energies in fostering the development of such committees at the local levels over the state. Such groups are complex and are representative of all segments of society and organizational units, so this will be a major undertaking which the Child Welfare Committee will actively support.

Dr. F. A. Gans has organized and put into operation the Poison Control Center in Salina. Thus there are now eight such centers in our state. The listing was recently published in the *Board of Health News.*

Dr. William Crouch, in his dual role of stalwart member of the Child Welfare Committee AND chairman of the Perinatal Welfare Committee, continues to investigate this problem and make recommendations to this committee. He, with Dr. Jubelt and Dr. Young, has now published *Standards of Care for the Newborn* in the November, 1958, issue of the JOURNAL OF THE KANSAS MEDICAL SOCIETY. This committee urges all who have contact with newborn care—nurses, individual physicians, hospital administrators, etc.—to familiarize themselves with this material.

Dr. William McGuire has been actively interested in programs to stimulate interest in the physicial fitness of Kansas children. At the present time he is collecting pertinent information about the tests recommended by the American Association for Health, Physical Education, and Recreation. No doubt this committee would approve such a program; and if so, would strongly recommend it to the School Health Council.

The Child Welfare Committee wishes to be of service to the members of the Kansas Medical Society. It can do so only by functioning, and it can function only if ideas or problems are presented.

Thomas C. Hurst, M.D., *Chairman*

CONSERVATION OF EYESIGHT

L. L. Calkins, Kansas City, Chairman; B. J. Ashley, Topeka; F. T. Cultron, Salina; J. E. Hill, Arkansas City; D. O. Howard, Wichita; H. L. Kirkpatrick, Topeka; M. S. Lake, Salina; D. T. Loy, Great Bend; H. E. Morgan, Newton; W. M. Scales, Hutchinson; K. W. Stock, Topeka; D. P. Trimble, Emporia; D. D. Vermillion, Goodland; F. E. Wrightman, Sabetha.

The Committee on Conservation of Eyesight met on September 7, 1958, at the Jawhawk Hotel in Topeka, in conjunction with the state supervising ophthalmologist, Dr. Karl Stock; representatives of the Services for the Blind Division of the State Department of Social Welfare, Miss M. Blase and Mr. Harry Hayes; the president of the Kansas Medical Society, Dr. T. P. Butcher, and the executive secretary of the Kansas Medical Society, Mr. Oliver Ebel.

Previous glaucoma detection programs in Hill

City where 494 persons over 40 years of age were examined, and in Phillipsburg where 944 persons were examined, were considered by the committee as a worthwhile and successful enterprise which had been carried out by the Services for the Blind Division with the cooperation of Dr. Stock, Dr. L. L. Hyde of the Kansas University House Staff in Ophthalmology, and regional ophthalmologists. Similar programs were recommended in 1958 and have been carried out in Smith Center, Colby, and Oakley. A total of 4,000 patients have been examined and over 200 have been referred for more detailed examination. Over 2 per cent of those examined have been found to have established glaucoma previously unsuspected and now under therapy. Dr. Hyde will report in detail on these findings at a later date.

A section on *special* optical aids for the visually handicapped is now available at the University Medical Center, and Miss Blase has encouraged physicians seeking this and for indigent patients to utilize this facility. Appointments can be made in the refraction clinic at the Medical Center at any time (Tuesday or Thursday afternoons). It should be made perfectly clear to the patient and the participating ophthalmologists throughout the state, who should act as the only referring facility, that this is for optical aids for patients who cannot read ordinary print with the best conventional spectacle assistance available and that ordinary refractions will not be done. Refraction should be performed by the referring physician and all locally available aids should be tried before referral. Appointments can be made by writing Dr. Dorothy Shaad, Eye Clinic, University of Kansas Medical Center, Kansas City, Kansas.

The committee reiterated its position with regard to the mass testing of vision in preschool and school children and strongly recommended to those present that only the Snellen test card system be employed and that all more complicated and much more expensive machine tests be avoided. The statistical records of a large St. Louis survey, along with the personal experiences of the members of the committee, were unanimously in favor of the efficiency and reliability of this simpler technique. Further, the committee went on record as disfavoring any legislation which might be proposed to change the present system in the state of Kansas where the Snellen test is used by the state health agencies.

Two exhibits pertaining to eye care will be displayed at the Hall of Health in Topeka in conjunction with the centennial meeting of the Kansas Medical Society. These exhibits answer common problems relating to the eyes and are jointly sponsored by the Kansas Medical Society and the Services for the Blind Division of the Department of Social Welfare. Physicians are encouraged to view these exhibits.

Larry L. Calkins, M.D., *Chairman*

Conservation of Hearing and Speech

V. R. Moorman, Hutchinson, Chairman; C. W. Armstrong, Salina; J. A. Budetti, Wichita; H. R. Dreamel, Salina; E. L. Gann, Emporia; H. M. Glover, Newton; C. L. Gray, Wichita; W. P. McKnight, Wichita; E. E. Miller, Pittsburg; R. Montgomery-Short, Halstead; W. D. Pitman, Pratt; R. R. Preston, Topeka; G. O. Proud, Kansas City; R. E. Riederer, Olathe; M. J. Ryan, Kansas City.

One meeting has been held at the time of this report and one more meeting is proposed for the current year.

Dr. C. W. Armstrong has prepared for the committee a series of articles on deafness to be submitted to the JOURNAL OF THE KANSAS MEDICAL SOCIETY for consideration as to publication. The committee has discussed the articles and made such revision as it deemed desirable.

At the next meeting, a final recommendation will be made on a means of communication between the school nurse and physician so that adequate data can be compiled as to hearing problems in school children. It is proposed that a form be sent with the child to the physician's office so that necessary data and recommendations can be easily and quickly reported.

V. R. Moorman, M.D., *Chairman*

Constitution and By-Laws

A. W. Fegtly, Wichita, Chairman; T. C. Ensey, Marion; G. R. Hastings, Garden City; Y. E. Parkhurst, Belle Plaine; G. L. Thorpe, Wichita; F. E. Totten, Wathena; C. E. Vestle, Humboldt.

A meeting of this Committee was held Sunday, March 15, and after much discussion three important amendments were approved for presentation to the House of Delegates at the May meeting in Topeka and SHOULD BE VOTED ON INDIVIDUALLY.

AMENDMENT NO. 1

The Executive Committee feeling that its work could be ably assisted by formal inclusion of the First and Second Vice-Presidents, requested their inclusion.

BY-LAWS, Chapter XI, Section 19 shall be amended to read:

SECTION 19.

The Executive Committee of the Council shall be composed of the President, President-Elect, the First Vice-President, the Second Vice-President, the Secretary and the Treasurer.

The Committee shall meet at the call of the President and shall meet at least 6 times during the society year. They shall have authority to act in the interim between meetings of the Council upon all

matters which would ordinarily require approval of the Council, but which do not properly necessitate special meetings and which have not been delegated elsewhere by these By-Laws.

AMENDMENT NO. 2

WHEREAS at the last session in Kansas City, a special committee was appointed to study and recommend the advisability of the formation of a new state-wide committee whose function would be to correlate and advise future state meetings, making these more attractive for continued attendance and professional and economic interests of the members of the Society at large and;

WHEREAS the various Host Societies where meetings are held have expressed concern over which continuous attendance at the entire meetings has deteriorated, and ways and means could be made to make the entire meetings of greater interest and value to the membership and have special guidance in the preparation of the meetings format and;

WHEREAS the request has been made for a MEETING FORMAT COMMITTEE the following is being offered:

THE MEETING FORMAT COMMITTEE

(a) The President-Elect shall be the Chairman of the committee and shall call the committee in session as often as necessary but the first meeting shall be within 60 days after each annual session.

(b) Not longer than 30 days after the close of each annual session the President of the County Medical Society where the last meeting was held, with approval of his Board of Directors shall name an active member of his society to this MEETING FORMAT COMMITTEE, who shall serve until after the conclusion of the Annual Meeting held in the jurisdiction of his County Society. Should a vacancy occur a successor shall be appointed for the unexpired term.

(c) The President of each County Society in which annual meetings are held shall likewise appoint an active member of his Society to this committee whose term shall expire at the conclusion of the meeting held in that jurisdiction.

(d) The President of the Kansas Medical Society shall annually, not later than 30 days after taking office appoint a member from a component society, where annual meetings are not held, to this committee for a term of two years, except that first appointment after the passage of this amendment shall be one member for a one year term and one member for a two year term.

(e) The duties of the committee shall be to recommend to the Council the place and dates of the ANNUAL SESSION not less than two and one-half years ahead of the actual meeting and shall recommend to the Host society, the general format of the meeting, but this committee SHALL NOT select or secure speakers nor make local arrangements.

AMENDMENT NO. 3

The present system of electing the Nominating Committee from the list of Past Presidents was discussed. It was felt that a wider base for selection of Nominating Committee might encourage active participation of additional active members, result in a more democratic process in the selection of future Society Officers, and possibly uncover valuable, qualified and previously inactive members proficient for officers and leaders in society affairs and work. For these reasons and recognizing that nominations in the past are not criticised, but to the contrary deserve praise for their selections of candidates, well qualified with their abilities recognized because of former work in connection with the Past Presidents. For the above reasons the committee proposes the following amendment which offers an extremely democratic method of selection, and is hoped to bring into activity and interest members formerly quiescent or even critical.

BY-LAWS, Chapter VI. ELECTION OF OFFICERS, Section 1, Shall be amended to read:

The Nominating Committee shall consist of one member from each Councilor District who shall be selected by the Presidents of the component societies within the district. The member presented shall be an active member of a component society of the district he shall represent according to the following plan except that he may not be the Councilor nor may he be an elected Officer of the Kansas Medical Society at the time of his selection. Each Councilor shall arrange a meeting of the Presidents of all component societies in his district at a suitable time and place and such meeting shall be held not less than 120 days prior to each Annual Session for the selection of a member of the Nominating Committee. They shall immediately send the name of the selected member from his district to the Executive office. The President of the Society shall designate a member from this list as Chairman.

The Chairman shall call a meeting of the Nominating Committee, designating time and place, which shall prepare, not later than ninety days before the next Annual Session for publication in the JOURNAL OF THE KANSAS MEDICAL SOCIETY, a list of candidates for each elective office consisting of one or more candidates for the office of President-elect, First Vice-President, Secretary, Treasurer and Delegate-elect to the House of Delegates of the American Medical Association, and three or more candidates for the offices of Second Vice-President and Alternate Delegate to the American Medical Association. Whenever possible or practical the candidate or can-

didates for Treasurer shall be named from residents of the city or vicinity of the location of the central office. The Committee shall secure consent to each candidacy, and further agreement to serve if elected.

Other subjects involving matters important to the function of the State Society were discussed and recommendations for future disposition were made. No amendments being offered on them at this time.

A. The proper Succession in case of vacancy in the office of President-elect was thoroughly discussed, but because of the uncertainty of the time in his year of office that this should occur, it was impossible to set any more direct rule than is already provided for in the By-Laws for an election. No amendment is necessary.

B. The Blue Shield Relations Committee consists of one member appointed by the President from each of the seventeen Councilor Districts.

One district made the suggestion that the appointment be made from a list of members of the local Blue Shields Committee submitted by the local component society with preference, if any, expressed. The Committee approves the intent of the idea, and believes that if any or all districts should send in lists of those interested in that work, they would be welcomed and most favorably considered by the President in his appointments. However the initiative of this proposal can best come from the local source, rather than by general direction in the By-Laws.

In this connection it is recommended that each component society and for that matter each individual member interested in any phase of Society work, is invited and urged to send in names or lists of members who are interested in any committee or special work, to the Executive Office before January of each year, since committee membership is completed BEFORE each annual session.

C. The primary election held last session under a suspension of the rules and accompanied by amendments to the By-Laws was apparently satisfactory. Its future use was assured by adoption of the amendments by vote at the second meeting. While a time saver in the closing meeting, it adds time to the first meeting and its greatest value seems to be in that it gives the original delegates an opportunity to have a partial voice in the election since too frequently they are replaced by their alternates.

D. As a part of the Centennial and because since the printing in 1952 there have been innumerable important changes made in society formation and work, the Committee recommends that this House of Delegates requests and authorizes the Council to order reprinting of the Constitution and By-Laws to include all amendments adopted, including those adopted this year.

In conclusion I wish to thank the members of the Committee, Doctors Ensley, Hastings, Parkhurst, Thorpe, Totten and Vestle for their cooperation, and especially the members who together with Second Vice-President Glover and the efficient Executive Secretary, Mr. Ebel, attended and ably assisted in the development of these amendments and recommendations.

A. W. Fegtly, M.D., *Chairman*

Control of Cancer

G. L. Campbell, Arkansas City, Chairman; A. E. Bair, Independence; D. L. Berger, Mission; J. P. Berger, Wichita; C. S. Brady, Atchison; W. G. Cauble, Wichita; J. C. Dysart, Sterling; A. A. Fink, Topeka; W. A. Grosjean, Winfield; H. L. Hiebert, Topeka; J. D. Hilliard, Medicine Lodge; W. J. Kiser, Wichita; J. R. Kline, Wichita; J. L. Lattimore, Topeka; C. H. Miller, Parsons; N. C. Nash, Wichita; D. C. Reed, Wichita; L. W. Reynolds, Hays; R. H. Riedel, Topeka; D. S. Ruhe, Kansas City; R. P. Schellinger, Emporia; P. H. Schraer, Concordia; B. E. Stofer, Wichita; H. M. Wiley, Garden City.

The members of the Committee on the Control of Cancer of the Kansas Medical Society have assisted the Kansas division of the American Cancer Society in preparing the program for the Midwest Cancer Conference to be held in Wichita in the spring of 1959. Members have also assisted local communities in the drive for funds for the American Cancer Society. At the request of the United States Public Health Service, members of the committee were polled and a recommendation was forwarded to the Kansas Medical Society that it cooperate with the United States Public Health Service and with the Kansas Department of Health in making a survey of Kansas for the establishment of more accurate information concerning the incident and causative factors in carcinoma of the lung. No further work for this committee is planned in the next three months.

Garland L. Campbell, M.D., *Chairman*

Emergency Medical Care

F. C. Beelman, Topeka, Chairman; G. L. Ashley, Chanute; K. F. Bascom, Manhattan; R. W. Blackburn, Council Grove; G. L. Gill, Sterling; L. F. Glaser, Hutchinson; A. J. Horejsi, Ellsworth; C. C. Hunnicutt, Sabetha; H. H. Hyndman, Wichita; N. M. Jenkins, Salina; D. S. Klassen, Newton; G. E. Manahan, Lawrence; O. F. Prochkazka, Liberal; R. E. Speirs, Dodge City; J. F. Thurlow, Hays; D. P. Trees, Wichita.

The emergency medical care committee meeting reviewed the apparent responsibilities and functions of the committee.

FUNCTIONS OF THE COMMITTEE

It was agreed that the primary function was to stimulate and motivate, in so far as possible, medical

hospital staff planning and operations for emergency over-loads of patients from any source and at any time.

A secondary function was to coordinate local hospital disaster plans into a state wide and national plan as such plans become clear, reasonable and applicable. Further, to cooperate with similar emergency medical care committees, local, state or national.

BASIC SUGGESTIONS FOR EMERGENCY MEDICAL CARE

1. It is believed that hospitals can develop their own disaster plan and that all Kansas hospitals regardless of size, should have eventually a plan refined by trial operations for meeting local disaster patient loads.

2. The first step was to have an emergency medical care committee or disaster committee appointed for each hospital. Responsibility for the function of such a committee if not already in operation, should be with medical staff. It was suggested that these committees be made up of members who have functioned over a period of years with gradual change of committee members as desired by the staff. It was further suggested that such committee members serve on only one hospital mergency medical care committee.

3. All medical societies should have an emergency medical care committee. It should be the responsibility of the president of the local society to take the necessary measures leading to the establishment of such committees. Basic responsibility of the committee would be to assist hospitals in planning and trial operations, to review plans for duplication of assignments and activities, to coordinate and facilities the flow of requested medical personnel and supplies between hospitals in the area and when necessary from outside sources when requested by local hospital emergency medical care committees. In times of local disaster, chairmen of these committees could quickly ascertain the needs of each hospital and bring to bear on the problem personnel and supplies available within or without the area. Publishing names, addresses and phone numbers of the chairmen of local disaster committees would increase the ease of contact and flow of accurate information, professional personnel supplies. The committee also should stimulate hospital staff and local society meetings on disaster plans and problems.

WAYS AND MEANS OF OBTAINING ACTION

1. A joint committee should be established of members from the Kansas Hospital Association committee on disaster planning and the Kansas Medical Society committees on emergency medical care to meet quarterly and review all hospital emergncy medical care or disaster plans. The committee members also to act as observers at trial operations of plans when requested by hospitals and to provide a written review of suggestions or constructive criticism of procedures observed.

2. The Kansas Medical Society Committee on postgraduate education be requested to provide at the University of Kansas Medical Center or other suitable location, an annual one-day session dealing with disaster planning, operations, procedures and related subjects. The session to be open to both professional and lay members of hospital disaster committees and to other interested persons.

3. Each hospital emergency medical care or disaster committees obtain for use of its members the following:

A. Principles of disaster planning for hospitals and readings in disaster planning for hospitals both obtainable from the American Hospital Association, 18 E. Division St., Chicago, Illinois.

B. A copy of the American Medical Association *Journal* of January 24, 1959, containing the medical viewpoint on the subject of disaster planning.

C. A copy of "Operational Survival Plan, Health," from the Kansas State Civil Defense Division of the State Adjutant General's Office, State Capitol Building, Topeka, Kansas.

4. The committee further intends to obtain and make available information on the present status of disaster planning in Kansas hospitals and the names of committee chairmen and members of local medical societies.

F. C. Beelman, M.D., *Chairman*

ENDOWMENT

C. V. Black, Pratt, Chairman; R. R. Cave, Manhattan; H. M. Glover, Newton; K. R. Grigsby, Coffeyville; J. H. Lathrop, Concordia; D. C. McCarty, Medicine Lodge; R. A. Nelson, Wichita; R. J. Ohman, Dodge City; J. L. Perkins, Hutchinson; J. W. Randell, Marysville; R. Schrepfer, Kansas City; F. L. Smith, Jr., Colby; C. C. Underwood, Emporia.

The Endowment Committee held one meeting in Topeka, September 21, 1958. Guests were Doctors Wescoe and Wilson, and from the Endowment Committee of the University of Kansas were Mr. Youngberg, Mr. Barker, Doctors Schultz and Carr; Mr. Oliver Ebel and Mr. Rueben Dalbec.

It was decided to request the Council to act on the following suggestions: that upon the death of an important personage in the Kansas Medical Society, the central office immediately solicit the membership at large for contributions for a memorial fund in memory of the deceased.

There has been excellent cooperation between the Endowment Committee, A.M.E.F., and the Endowment Association of the University of Kansas.

Your chairman attended the meeting of the chairmen of the various states in Chicago, January 24-25,

and brings back the following report for 1958: 591 contributors gave $15,251. This is about 100 more contributors than last year and about $2,500 more from the doctors as the Society gave $2,400 in 1957. The breakdown is as follows: Dr. Bascom of Manhattan and Riley's Pharmacy of Wichita each gave $1,000. Dr. Bascom is one of 12 doctors over the whole U. S. who gave $1,000 or more. Other contributions: $500—1; $400—2; $22—4; $150—1; $100—20; $75—3; $50—25; $35—3; $25—50; $15—155; $10—189. Of these 591 contributors only 141 earmarked their gifts for the University of Kansas.

Topeka is again the banner city with 100 per cent contributors at $15 each. However, 10 per cent of their members gave in excess of this amount and two of them were $100 contributors. There were many 100 per cent counties; also 100 per cent councilor districts. The efforts of the councilors in putting this across is greatly appreciated. Nationwise and in Kansas about 10 per cent of the money obtained was from the efforts of the Woman's Auxiliary, and their contributions were in excess of what their husbands gave. I am sure they are also a great influence in the increased gifts from their husbands. The 1958 figures will not be available for some time.

The committee would like to make the following suggestions:

1. Following the example of Topeka that each county be requested by the House of Delegates to have each member contribute at least $15 to A.M.E.F.

2. That the following methods of securing additional contributions which were suggested at the January meeting, and which have been tried in other states, be considered for Kansas.

Many physicans are turning over to A.M.E.F. money they receive from Blue Shield for caring for a physician or his family who carry Blue Shield to pay the physician who would otherwise refuse pay for this service.

An A.M.E.F. contribution be made by a society on behalf of a guest speaker who has honored them and refuses pay for this service.

In lieu of Christmas gifts to referring physicians.

Cyril V. Black, M.D., *Chairman*

Fee Schedule

W. J. Reals, Wichita, Chairman, Pathology; W. L. Beller, Topeka, Radiology; H. J. Brown, Winfield, Anesthesiology; J. G. Claypool, Howard, Internal Medicine; D. R. Davis, Emporia, Pediatrics; J. E. Hill; Arkansas City, Ophthalmology; J. A. Howell, Wellington, General Practice; G. B. Joyce, Topeka, Orthopedics; J. G. Kendrick, Wichita, Obstetrics and Gynecology; J. L. Lattimore, Topeka; W. R. Lentz, Seneca, General Practice; C. M. Lessenden, Jr., Topeka, Dermatology; M. D. McComas, Jr., Concordia, Urology; W. P. McKnight, Wichita, ENT; P. W. Morgan, Emporia, Internal Medicine; C. R. Openshaw, Hutchinson, Thoracic Surgery; E. J. Ryan, Emporia, Blue Shield; S. L. Vander Velde, Emporia, Surgery.

The committee on fees has been active during the past year. The concept of using a subcommittee to conduct business was again used during the year just past, and the Executive Committee as well as the entire committee met on numerous occasions to consider business.

The first meeting of the subcommittee was held on August 12, 1958, at Emporia. At this meeting is was resolved that all future negotiations for fee schedules on contracts of any type would be based on the Relative Value Schedule as adopted by the House of Delegates last year.

The entire committee met on Sunday, October 5, at Wichita. At this meeting representatives from the Kansas Society of Anesthesiologists appeared with the request that their fees as paid through Blue Shield be increased. The committee on fees acted favorably on their request, passing a resolution requesting Blue Shield to increase payments to anesthesiologists as soon as possible. Considerable research was done by the committee on fees paid to anestheologists from other states, and this material was presented in the meeting by Mr. Rueben Dalbec of the Kansas Medical Society and Mr. Tom Reed of Blue Shield. The resolution follows:

Recommend to the Blue Shield Board that at present anesthesia fees be paid in the vicinity of $2.00 a unit of the Kansas Relative Value Scale for services under Plan A, and that the unit value be raised to an equitable basis with other payments when premiums are raised on January 1.

The American Medical Association requested that representation from the Kansas Medical Society appear in Memphis, Tennessee, on October 1 and 2 to testify on the Relative Value Schedule as adopted by Kansas. Accordingly, the chairman and Dr. Gordon Claypool, a member of the committee, made the trip to Memphis and appeared for two days before this Committee on Medical Practice. The experience of the Kansas Medical Society was given.

The subcommittee on fees met again on November 24, 1958, at Emporia to consider a number of problems. At this meeting much study was given to the possible conversion of the existing $3,000 plan and the $4,500 plan of Blue Shield to the Relative Value Schedule. It developed during the meeting, however, that if immediate conversion were done it would result in a large increase in dues to all of the members, especially in the lower income group. After much study it was decided that it would be impossible at this time to convert to the Relative Value Schedule, but the subcommittee strongly recom-

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HENRY DOUBILET, M.D., New York University, New York City.
MERLIN K. DU VAL, JR., M.D., University of Oklahoma, Oklahoma City.
BEN EISEMAN, M.D., V. A. Hospital, Denver, Colo.
KARL E. KARLSON, M.D., State University of New York, Brooklyn.
CARL A. MOYER, M.D., Washington University, St. Louis, Mo.
ALTON OCHSNER, M.D., Tulane University, New Orleans, La.
MARK M. RAVITCH, M.D., Johns Hopkins University, Baltimore, Md.
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The Management of Bleeding from Esophagogastric Varices.
The Selection of Treatment in Thyrotoxicosis.
The Undescended Testicle (Cryptorchidism).
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Controversial Issue—The Choice of Operation for Chronic Pancreatitis.
Parenteral Nutritional Support of the Surgical Patient.
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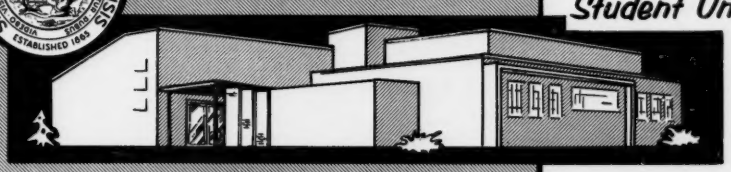

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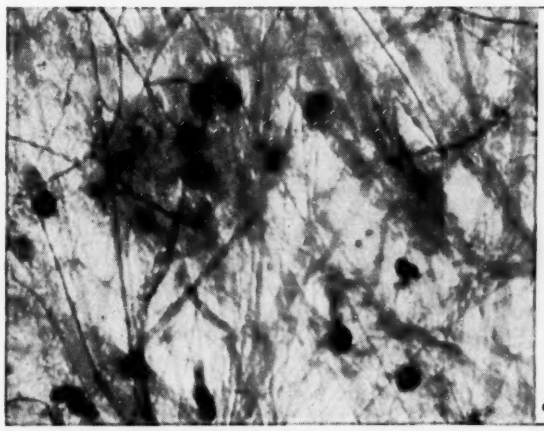

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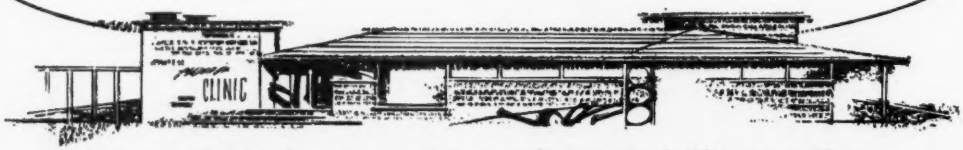

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mended that future studies over the next several years be made in an effort to bring fees paid by the $3,000 and the $4,500 plan into line with the Relative Value Schedule.

The subcommittee recommended that the entire fee committee study the possibility of creating a new plan based on a flexible concept and designed to provide service benefits for a larger portion of the population, and that the fees should be paid according to the Relative Value Schedule at about $4.50 to $5.00 a point. Some form of deductible method also should be included in this program or made optionable as an aid in controlling usage. The subcommittee also hoped that Blue Shield might prepare such a plan at an early date to enable the fee committee to adopt concrete recommendations on this subject which could then be sent out to the doctors of Kansas so that they could act in an informed manner at the next House of Delegates meeting.

The entire committee met on March 1, 1959, at Wichita to consider the actions of the subcommittee. Guests present included members of the Kansas Society of Radiologists who wished to present their opinions and concepts of the Relative Value Schedule as it pertained to radiology. After much discussion it was suggested that a study of fees in the state of Kansas be undertaken in the near future. The Radiology Society was also asked to submit in writing its proposed relative value schedule for basic fees for x-ray coverage.

The chairman presented the material which had been previously given to the subcommittee on fees. This included the impractibility of rating plans A and B ($3,000 and $4,500) to the Relative Value Schedule as well as the many problems inherent in raising and lowering the fees in these plans. In addition, the committee on fees felt strongly that there is urgent need to strengthen the prepayment concept by writing a plan that includes a larger number of people in the state who wish service benefits. Accordingly, the following resolution was adopted:

Be it therefore resolved that the Fee Committee of the Kansas Medical Society recommends that if the House of Delegates approves in principle the development of a plan which will provide service benefits on a basis that will be applicable to 75 per cent of the Kansas population, that the plan be based on the Kansas Relative Value Schedule to the extent practicable at a dollar value per point of $5.00.

Be it further resolved that such a plan be based on the Relative Value Schedule as the schedule may be amended by the House of Delegates, such amendments to be presented by the Fee Committee at the same time this resolution is presented, and

Be it further recommended that the unit value as applied to such plan shall be annually reviewed by the House of Delegates.

The committee again wishes to thank Mr. Oliver Ebel and Mr. Rueben Dalbec for their help during the past year. The committee also wishes to thank the many interested Society members who have appeared before the committee and aided us during the year just passed.

William J. Reals, M.D., *Chairman*

Gerontology

E. G. Dimond, Kansas City, Chairman; J. O. Austin, Garden City; L. J. Beyer, Lyons; J. M. Catlett, Emporia; T. Dechairo, Westmoreland; D. M. Diefendorf, Waterville; F. E. Dillenbeck, El Dorado; G. M. Edmonds, Horton; H. A. Flanders, Hays; V. L. Jackson, Altamont; Ronald McCoy, Coldwater; J. J. Marchbanks, Oakley; R. F. Morton, Arkansas City; T. V. Oltman, Riley; J. W. Parker, Burlington; D. V. Preheim, Newton; E. S. Rich, Hutchinson; D. L. Rose, Kansas City; H. L. Songer, Lincoln; C. E. Stevenson, Neodesha; G. A. Surface, Ellis.

The Gerontology Committee has been aware of other activities of the Society in the field of aging and insurance during this year and has felt that until these goals were apparent that this Committee could best serve by waiting for further instructions from the Society.

The Committee was represented at a national meeting on problems of aging sponsored by the A.M.A. in Chicago. Other activities have been in the field of writing and distributing significant literature to the members of the Committee.

E. Grey Dimond, M.D., *Chairman*

History

R. R. Melton, Marion, Chairman; J. F. Barr, Ottawa; H. C. Clark, Wichita; A. W. Corbett, Emporia; R. H. Edmiston, Lawrence; J. G. Hughbanks, Independence; C. C. Nesselrode, Kansas City; G. R. Peters, Kansas City; R. A. Schwegler, Lawrence; G. S. Voorhees, Leavenworth.

This is being written February 10, 1959, exactly 100 years after the charter of the Kansas Medical Society was granted by the Territorial Legislature. The Committee on History is pleased to report that it has reviewed the manuscript of *A Century of Medicine in Kansas* and has found it factual, easy to read, and interesting. We hope you like it.

The committee suffered a great loss upon the death of Dr. W. M. Mills of Topeka, who had been a member of our committee for several years and was acting as chairman at the time of his passing. Dr. Mills had been active in the Kansas Medical Society for many years, and his community of Topeka is better for his having lived there.

The committee is grateful to the author of *A*

Century of Medicine in Kansas, Dr. Tom Bonner of the Department of History of the University of Omaha. We also wish to acknowledge the friendly and enthusiastic cooperation of Dr. Nelson and his associates in the Department of History, Mr. ——— ——— of the Department of Journalism, Mr. ——— ——— of the University of Kansas Press, Mr. Nyle Miller and his associates of the Kansas State Historical Society. We are deeply indebted to Dr. Franklin D. Murphy, chancellor of the university, for his encouragement, his support, and his suggestions for the book; also to Dr. W. Clarke Wescoe, dean of the School of Medicine, and Dr. Vernon E. Wilson, his assistant, for their enthusiastic support of the work; and to Oliver Ebel and Rueben Dalbec for their constant help.

We urgently ask your support of the activities of this, our centennial year. Attend the meetings, Science Fair, Hall of Health. Partake of some special activity in your own community.

Ralph R. Melton, M.D., *Chairman*

HOSPITALS

E. R. Gelvin, Concordia, Chairman; G. B. Athy, Columbus; L. E. Beal, Fredonia; E. Beebe, Olathe; M. D. Christensen, Kiowa; J. D. Colt, Manhattan; E. T. Gertson, Atwood; J. L. Grove, Newton; G. F. Gsell, Wichita; R. H. Hill, Meade; D. B. Parker, Ness City; A. J. Rettenmaier, Kansas City; H. B. Russell, Great Bend; D. J. Smith, Overland Park; C. D. Snyder, Winfield; E. B. Struxness, Hutchinson: R. E. White, Garnett.

This proposed plan is the result of several years effort by this committee. It is recommended to the House of Delegates for consideration.

RULES AND REGULATIONS OF THE KANSAS VOLUNTARY COUNCIL ON PROFESSIONAL STANDARDS FOR HOSPITALS

Preamble

Recognizing that the medical staff is responsible for the quality of medical care in a hospital and must accept and assume this responsibility, and that the best interests of the patients are protected by concerted effort, the physicians practicing in the hospitals of Kansas do voluntarily subscribe to the Rules and Regulations hereinafter stated.

For the purpose of these Rules and Regulations the words "medical staff" shall be interpreted to include all physicians who are privileged to attend patients in the hospitals of the State of Kansas.

Whenever the term "governing body" appears it shall be interpreted to refer to the Board of Directors, Board of Trustees, Board of Managers, or other controlling group.

This council should contact the staffs of all hospitals in the state, regardless of size, urging the staff to request their governing bodies to join in the activities of the council.

The council further feels that hospitals of one or two staff members should unite with other small hospitals in the vicinity to establish combined staffs of at least six members.

ARTICLE I—NAME

The name of this organization shall be the "Kansas Voluntary Council on Professional Standards for Hospitals."

ARTICLE II—PURPOSE

The purpose shall be:

1. To insure that all patients admitted to the hospital or treated in the out-patient department receive the best possible care.
2. To establish minimum and optimum professional standards and criteria for hospitals in the state.
3. To provide the means whereby problems of a medico-administrative nature may be discussed by the medical staff with the governing body and the administration.
4. To review periodically the activities of member hospitals so as to help them maintain and improve their standards.

ARTICLE III—MEMBERSHIP

1. The council shall be composed of four members from the Kansas Medical Society, appointed by the Council of the Kansas Medical Society on recommendation of the president. They shall serve two year terms, and such appointments shall be staggered so that only two members retire each year.
2. Two members from the Kansas Hospital Association, also on staggered terms.
3. Members may be eligible for reappointment but not to exceed three consecutive terms.

ARTICLE IV—DUTIES OF THE COUNCIL

1. It shall fix and publish standards and regulations for member hospitals.
2. It shall periodically review and possibly modify the regulations as the need arises.
3. It shall actively contact all hospitals in the state and stimulate them to join.
4. It shall prepare an appropriate certificate signifying that the hospital has voluntarily met the minimum recommended requirements and shall present this to all eligible hospitals regularly at such intervals as the council may determine.
5. It shall serve as a referee and mediator in disputes arising in hospitals concerning the staff, the administrator and the governing body.
6. It shall organize for the purpose of conducting

business, keep records of all meetings and shall meet as needed, but not less than annually.

ARTICLE V—STAFF REGULATIONS

1. Active Staff Membership

a. The applicant shall present evidence that he holds a valid Kansas license to practice medicine and surgery.

b. The applicant for membership on the active staff shall be a graduate of an approved medical school, legally licensed in the State of Kansas to practice medicine and surgery, holding membership in a local medical society and practicing in the community or within a reasonable distance of the hospital.

c. Written application for staff membership including the physician's biography of educational attainment shall be presented and is subject, where necessary, to investigation and/or confirmation by a credentials committee of the staff.

d. Staff appointments are for one year and must be made and renewed by the governing board upon the recommendation of the staff.

e. Staff recommendation shall be made to the governing board as to the degree of service the service the applicant may be permitted to perform.

f. All applicants should be required a term of not less than six months probationary status where a staff member or members shall serve to assist, supervise, and evaluate his performance prior to recommendation for full staff privileges.

g. It is desirable that some additional training after internship be obtained before a physician is authorized unlimited privileges within the hospital. The extent to which this is to be enforced should be determined locally.

h. Any person practicing within a hospital on a restricted privilege shall be provided the opportunity to enlarge his privileges on the basis of additional training and experience with demonstrated proficiency in the enlarged area of activity.

i. The active staff shall establish and maintain a formal organization in which there shall be held an annual election to select a chief of staff and a secretary. There shall also be an executive committee and committees on records and on tissues.

2. Courtesy Staff

a. The applicant shall be limited in his practice to the professional services authorized by his valid Kansas license.

b. The courtesy staff shall be governed by the same regulations as those governing the active staff.

c. When courtesy staff members, other than those licensed to practice medicine and surgery in Kansas request admission of a patient to the hospital, it shall be the responsibility of an active staff member to make such admission and to assume obligation over the patient's care.

3. Emergency and Temporary Privileges

a. In case of emergency the attending physician shall be expected to do all in his ability to save the life of the patient, including the calling of such consultation as may be indicated.

b. The administrator of the hospital shall be empowered to make temporary appointments to the medical staff during this period and for the length only that such an emergency exists.

ARTICLE VI—RELATIONS BETWEEN STAFF AND GOVERNING BOARD

1. Active and continuing liaison functioning in both directions shall be established between the staff and the governing board.

2. The extent of hospital privileges of any professional individual shall be determined by the governing board on recommendation of the staff.

3. Where necessary, there should be a provision for joint meetings between the staff and the administrators and the governing board.

ARTICLE VII—PROFESSIONAL CARE

1. The Practice of Surgery

a. Assistance by an active staff member required,

1) During the applicant's probationary period.

2) For all major surgery.

3) Where the nature of a surgical procedure makes it impractical for an assistant to be present in the operating room, some provision should be agreed upon to provide assistance in the event of illness and/or incapacity.

b. Consultation should be obtained,

1) In major surgical cases where the patient is not a good risk, and in all cases in which the diagnosis is obscure, or when there is doubt as to the best therapeutic measures to be utilized.

2) Wherever problems arise in the above areas potentially extending beyond the scope of any physician whose activities are limited.

c. Tissue examination

1) Tissues removed for pathological reason shall be examined by a competent pathologist and the report placed on the record.

2) Normal foreskins, tonsils, hernial sacs and similar specimens shall be exempt from required pathological examination.

3) A reasonable effort should be made to obtain autopsies.

d. A written report shall be made of all operative findings, the procedures employed and the pathology encountered.

e. Anesthesia shall be performed only by qualified personnel and a written record of the anesthesia shall be maintained.

2. In the practice of obstetrics, consultation with a qualified physician shall be required.

a. For all major complications.

b. In all first caesarean sections.

c. In all curettages or other procedures by which a known or suspected pregnancy may be interrupted.

d. In sterilization procedures because such are illegal in Kansas except when performed for adquate medical reasons.

3. In the practice of medicine, consultation shall be requested in all unusual situations where advice or assistance might be needed.

4. In the practice of Radiology,

a. Consultation, directly or by mail, on all questionable situations should be encouraged.

b. Radiation therapy shall be done only under the direct supervision of a Radiologist.

ARTICLE VIII—RECORDS

1. An admission diagnosis, written history, and record of the physical examination shall be completed on the chart within a reasonable time after admission and prior to surgery.

2. Adequate records on all admissions, births, deaths, laboratory procedures, radiological reports, treatment and surgery (including pathological reports on tissue removed) shall be maintained.

3. Minimum laboratory reports consisting of blood count and urine examination and in obstetrical patients including blood type and Rh factor shall be on the record within 24 hours. These tests should be done in the hospital upon admission or the report transferred to the record if done previously in the doctor's office.

4. A signed report of all consultations shall be made a part of the record.

ARTICLE IX—DISCIPLINE

1. Controversies relating to ethics, professional competency or rules infraction between the professional and the administrative personnel or the governing board shall be solved wherever possible through mediation of the local Executive Committee.

2. Where the above becomes impractical such problem shall be referred to the staff and then, when necessary, to this Council.

Raymond E. Gelvin, M.D., *Chairman*

Maternal Welfare

R. G. Heasty, Manhattan, Chairman; A. H. Baum, Dodge City; R. M. Carr, Junction City; E. X. Crowley, Wichita; H. M. Floersch, Kansas City; H. M. Foster, Hays; D. E. Gray, Topeka; R. L. Hermes, Lawrence; J. G. Kendrick, Wichita; G. M. Martin, Topeka; O. L. Martin, Salina; M. D. Morris, Topeka; W. R. Roy, Topeka; C. E. Shrader, Newton; R. Sohlberg, Jr., McPherson; J. C. Schroll, Hutchinson; E. F. Steichen, Lenora; D. L. Traylor, Emporia; H. L. Wilcox, Lawrence; L. E. Woodard, Wichita.

The Maternal Welfare Committee has continued its main function of investigating maternal deaths. The reports of these investigations were reviewed by the entire committee in its meetings and after thorough discussion of the facts presented the committee arrived at its conclusions. One member of the committee was then assigned the task of writing a summary of the conclusions for publication in the JOURNAL. We have tried to make these summaries as educational as possible and I feel that in this respect we are gradually improving.

The committee encouraged the plans of the Perinatal Mortality and Morbidity Committee in setting up local study group interested in perinatal mortality and morbidity. Our committee suggested that the guide for these groups be sent to all members of the Kansas Obstetrical Society.

The question of inviting the physician involved in a maternal death to the committee meeting was discussed. It was finally decided that the physician should be asked to the meeting if he so desired realizing that his presence would prevent him from remaining anonymous to the members of the committee.

Doctor Ralph Reis of Northwestern University has consented to summarize the cases reported in the JOURNAL during 1958. This summary will appear in a future issue of the JOURNAL.

The committee agreed to work with the Kansas

Obstetrical Society in helping to set up a section on obstetrics in the Hall of Health Exhibit.

I wish to thank Doctor Evalyn S. Gendel of the Kansas State Board of Health for her untiring efforts in investigating old cases not yet reported and bringing us up to a position where we are now operating on a current basis.

Robert G. Heasty, M.D., *Chairman*

Medical Economics

B. A. Nelson, Manhattan, Chairman; J. N. Blank, Hutchinson; H. L. Bogan, Baxter Springs; K. L. Graham, Leavenworth; J. K. Griffith, Valley Falls; G. E. Kassebaum, El Dorado; J. A. McClure, Topeka; M. L. Masterson, Paola; M. B. Miller, Topeka; L. S. Nelson, Jr., Salina; E. B. Scagnelli, Dodge City; F. G. Schenck, Burlingame; C. H. Steele, Kansas City; G. C. Steinberger, Abilene.

The Committee on Medical Economics this year directed its efforts to the society's well developed and diversified insurance programs, further consideration of social security for physicians, malpractice insurance, insurance claim reporting, and the ever present baffling problem of indigent medical care.

The Group Life Insurance program was placed in effect with enrollment of all applicants, whether or not medically insurable. The committee feels this is an excellent supplement life coverage at an extremely low premium with especially generous coverage for the young doctor who needs most protection for his growing family. The contract is also available to doctors' wives and office managers.

The Washington National disability insurance was well accepted with its improved and expanded policy. Members should be reminded that further coverage with additional features is obtainable under present contracts.

The other excellent disability contract underwritten by the Commercial Insurance Company has been reopened. The northeast counties recently canvassed have added many new subscribers who had previously overlooked this insurance. All areas of the state will be canvassed as weather conditions permit. This policy may also be carried for executive secretaries of county societies. The committee feels that our membership is very well protected with both of these disability contracts available and is pleased that so many members carry both policies.

An excellent policy furnishing Accidental Death and Dismemberment insurance up to $150,000, at the very low rate of ninety cents per thousand, will be presented to the membership this spring. This is the same contract as carried by the majority of the membership of the American College of Surgeons. It is the first contract approved by the Kansas insurance commissioner as a straight group insurance contract with a master policy. The committee is much gratified to have it available to us.

Your committee recognizes that an increasing number of physicians seem to favor compulsory social security for physicians. The committee still is firm in its conviction that such an action by Congress would be most unfortunate, that the taxes levied would be excessive for the benefits obtained and subject to repeated increased levies without control, that the benefits never would be realized by most physicians, and that the thoughtful physician should fear being forced into a system with compulsory taxation and questionable benefits from which he could never henceforth withdraw.

Malpractice claims have become an increasingly serious problem with ever growing threats of large settlements. It is believed that high insurance coverage engenders claims for large sums, but, since so many doctors fear inadequate protection with low coverage, the very excellent Medical Protective Company is now offering additional supplemental coverage where it is desired.

The committee has recommended to the president of the society, that a committee on malpractice be formed, to investigate every potential malpractice suit, study the disability hazards involved, and furnish competent advice as to procedure, advisability of negotiating settlements, and modes of effective defense if a case reaches the courts. The suggested committee would be entirely advisory in nature and would not supply financial aid nor legal services.

An early meeting with the Board of Social Welfare gave promise of an arrangement for direct and separate negotiation with pharmacists, hospitals, and doctors on a workable basis. Subsequently, however, a bill was presented to the legislature which practically negated any form of fair compensation for medical services. A hurried canvass of representative county societies failed to elicit any support for an alternate plan to give the society complete control of expenditures for indigent medical care. Action of the legislature will be completed before this report is published and further moves by the society will be determined by that action.

The committee asked the president to appoint a member to serve as the society representative of the Health Insurance Council of Kansas. This is an organization of representatives of Kansas insurance companies and agents and a liaison seems advisable.

The standard insurance reporting form prepared for use of the membership is being widely used and is accepted by most insurance companies as adequate. The form has been revised slightly to clarify the information submitted by the essential brevity has been retained.

Barrett A. Nelson, M.D., *Chairman*

Medicare

L. S. Nelson, Sr., Chairman; T. P. Butcher, Emporia; H. M. Foster, Hays; G. B. Joyce, Topeka; C. W. Miller, Wichita; G. R. Peters, Kansas City; C. J. Wilen, Manhattan.

This is a thank you to all the physicians who have served so faithfully in the work of the late Medicare program. It has been tiresome, tedious, and thankless work. We found ourselves working for the government without recompense, and endeavoring to determine how to justify, by law, charges for which, according to law, we could grant just compensation. This invariably occasioned ill will on the part of the physicians involved even though the committee was powerless to do otherwise. Now, of course, the program has been changed by directive and the work lessened. The cost to the government was so much greater than anticipated (over $117,000,000 in a year) that the program has been drastically altered.

Another word of thanks is due the representatives of Blue Shield for their constant attendance at meetings and their continued study of the voluminous directives which were constantly changing the details of the program.

Our executive secretary, Mr. Oliver Ebel, rendered invaluable service in caring for all the correspondence, as well as attending every meeting. His constructive idea resulted in dividing the state so that there would be five committees instead of one. This is a very welcome change which relieved congestion, and if some form of Medicare is again tried the work will never be as voluminous as previously.

Again a sincere thanks to all who devoted so much effort in behalf of the members of the Kansas Medical Society.

L. S. Nelson, M.D., *Chairman*

Mental Health

P. W. Thompson, Topeka, Chairman; A. J. Adams, Wichita; H. V. Bair, Parsons; A. P. Bay, Topeka; R. D. Brooks, Madison; O. R. Cram, Jr., Larned; J. A. Dunagin, Topeka; P. E. Feldman, Topeka; G. W. Fields, Scott City; T. L. Foster, Halstead; L. W. Hatton, Salina; G. W. Jackson, Topeka; P. C. Laybourne, Jr., Kansas City; R. A. Moon, Prairie Village; B. A. Nelson, Manhattan; F. C. Newsom, Wichita; W. F. Roth, Jr., Kansas City; W. C. Schwartz, Manhattan; W. O. Wallace, Atchison; H. V. Williams, Topeka; M. E. Wright, Lawrence.

The Committee on Mental Health has this year concerned itself almost solely with preparing proposals for changes in the laws regarding hospitalization of psychiatric patients. The committee succeeded, with the cooperation of Prof. Marvin Larson of the Washburn Law School, in completing this project in a form suitable for presentation to the Kansas legislators. The proposals were endorsed in large measure by Dr. Geoffrey Martin of the State Board of Health, the membership of the District Branch of the American Psychiatric Association, and by Dr. George Jackson of the State Board of Social Welfare.

Considerable groundwork has been done by Prof. Larson with the Probate Judges Association and with the Bar Association. Judge E. Newton Vickers of Shawnee County has been most cooperative in advising the committee. More work is still to be done with the Legislature.

The general purpose of these proposals is to make the law regarding the mentally ill more consonant with advances in medical thinking about psychiatric patients.

Prescott W. Thompson, M.D., *Chairman*

Necrology

O. R. Clark, Topeka, Chairman; D. E. Gray, Topeka; R. Greer, Topeka; D. Lawson, Topeka; J. A. Segerson, Topeka.

The Committee on Necrology submits the following list of members whose deaths have been reported since the last meeting of the House of Delegates:

Name and Address	*Age*	*Date 1958*
Dr. Adelbert L. Suwalsky, Leavenworth	79	Mar. 27
Dr. Oman Reuben Brittain, Salina	79	Apr. 3
Dr. Chester Earle Joss, Topeka	73	Apr. 22
Dr. Minutte Smith Mundell, Hutchinson	81	Apr. 24
Dr. Elmer Andrew Miner, Independence	87	Apr. 25
Dr. Joseph H. Buckles, Waverly	82	May 11
Dr. Floyd Eldridge Wallace, Chase	78	May 17
Dr. Francis Claybourne Basham, Eureka	48	May 22
Dr. Joseph David Pettet, Pittsburg	83	May 25
Dr. William Merrill Mills, Topeka	75	May 26
Dr. Albert Beam, Americus	87	June 2
Dr. Joseph Rudolph Betthauser, Hays	69	June 3
Dr. Jacob Harlow Enns, Newton	76	June 26
Dr. John Albert Phillipsen, Wellington	86	June 28
Dr. Ralph Waldo Emerson, Topeka	65	July 1
Dr. Durrell Keeling Knight, Kansas City	63	Aug. 4
Dr. Andrew J. Turner, Garnett	89	Aug. 4
Dr. George Morris Gray, Kansas City	102	Aug. 12
Dr. Joseph A. Poppen, Burr Oak	82	Aug. 16
Dr. Henry Osmond Hardesty, Jennings	88	Aug. 17
Dr. Paul A. Binter, Wichita	43	Aug. 26
Dr. John Raymond Shumway, Pleasanton	80	Oct. 2
Dr. Paul Ernest Koerber, Russell	82	Oct. 6
Dr. Frank A. Kinnamon, Concordia	79	Oct. 9
Dr. Athol Cochran, Pratt	71	Oct. 19
Dr. Thomas Elmo Smith, Independence	80	Oct. 21
Dr. Ernest Elwood Tippin, Sr., Wichita	67	Oct. 30
Dr. Walter James Singleton, LaCrosse	65	Nov. 7
Dr. Avery Mortomer Garton, Chanute	75	Nov. 27
Dr. Harold Thoes Morris, Topeka	63	Dec. 3

Dr. John Fredrick Northrup, Topeka	83	Dec. 7
Dr. William S. Swart, Girard	83	Dec. 19
Dr. William Preston Sterrett, Kansas City	100	Dec. 21
Dr. William Wallace Reed, Topeka	78	Dec. 22
1959		
Dr. Edgar Sylvester Haworth, Wichita	78	Jan. 9
Dr. Arthur Whitaker, Atchison	54	Jan. 14
Dr. Claib Bosworth Harris, Sr., Garnett	83	Feb. 4
Dr. Jacob Franklin Gsell, Wichita	85	Feb. 12
Dr. Rudolph Theodore Unruh, Kinsley	59	Feb. 20
Dr. Lewis David Johnson, Chanute	81	Mar. 2
Dr. Claude William Inge, Concordia	75	Mar. 2
Dr. John Donald McCrary, Manhattan	32	Mar. 6

Orville R. Clark, M.D., *Chairman*

Nominations

L. S. Nelson, Sr., Salina, Chairman; C. M. Barnes, Seneca; C. W. Miller, Wichita; Haddon Peck, St. Francis; H. N. Tihen, Wichita.

The Nominating Committee of the Kansas Medical Society for the current year presents the following slate of candidates for Society offices:

President-Elect

Dr. Frederick E. Wrightman, Sabetha; Washington University School of Medicine, 1917; cardiology.

First Vice-President

Dr. Harold M. Glover, Newton; University of Illinois College of Medicine, 1916; surgery.

Second Vice-President

Dr. Norton L. Francis, Wichita; University of Nebraska College of Medicine, 1935; otolaryngology.

Dr. H. Penfield Jones, Lawrence; Harvard Medical School, 1931; surgery.

Dr. H. Preston Palmer, Scott City; University of Kansas School of Medicine, 1929; general practice.

Dr. Lloyd W. Reynolds, Hays; Ohio State University College of Medicine, 1934; surgery.

Dr. Edward J. Ryan, Emporia; University of Kansas School of Medicine, 1936; internal medicine.

Constitutional Secretary

Dr. George E. Burket, Jr., Kingman; University of Kansas School of Medicine, 1937; general practice.

Treasurer

Dr. John L. Lattimore, Topeka; Fort Worth School of Medicine, 1918; pathology.

A.M.A. Delegate, 1960-1962

Dr. George F. Gsell, Wichita; Rush Medical College, 1933; ophthalmology.

A.M.A. Alternate, 1960-1962

Dr. Cyril V. Black, Pratt; University of Texas, Medical Branch, 1930; surgery.

Dr. H. St. Clair O'Donnell, Ellsworth; Washington University School of Medicine, 1917; medicine and surgery.

Dr. Robert Sohlberg, Jr., McPherson; Northwestern University Medical School, 1934; general practice.

Additional nominations may be made from the floor at the time of election, during the 100th annual meeting of the Society.

L. S. Nelson, M.D., *Chairman*

Pathology

A. A. Fink, Topeka, Chairman; C. A. Hellwig, Halstead; W. E. Luedtke, Emporia; W. J. Reals, Wichita; C. J. Weber, Salina.

The pathologists had a meeting in Topeka on February 22, which was a joint meeting with representatives of the medical technologists of the State of Kansas.

Discussion of salary ranges and review of the salary ranges of technicians throughout the State of Kansas was engaged in. Also discussion of the fact that the medical technologist requirements for training and for certification are going to be upped as of the year 1962, when all medical technologists will have to take three years of college instead of the present two years of college and one year of training. After 1962, it will be necessary for those desiring registration to take three years of college and a fourth year of training, making the total program four years instead of three years, as in the past.

Liaison was established between the medical technologists and the Scientific Exhibits Committee of the Kansas State Mdical Society for an exhibit that they will have in the Scientific Hall.

It was further considered that we will have a joint committee, with pathologists serving on this committee, to set up some guidance for the colleges and universities in the State of Kansas as to the subject material that should be covered by premedical technology teaching. This committee will be appointed, and in the ensuing calendar year, hopes to be able to meet with some of the educators of the state and to come up with a definite guide for the colleges and universities in the State of Kansas to utilize in setting up

educational programs for premedical technologists.

It is the belief of the Chairman of the Committee on Pathology that this was a good year and no other specific problems were brought to the attention of the Committee, and the liaison between doctors and the allied field of medical technologists has been strengthened through the efforts of the Committee in the past years.

A. A. Fink, M.D., *Chairman*

Perinatal Welfare

W. H. Crouch, Topeka, Chairman; G. E. Burket, Jr., Kingman; H. P. Jubelt, Manhattan; R. C. Knappenberger, Wichita; G. M. Martin, Topeka; O. L. Martin, Salina; R. A. Nelson, Wichita; R. E. Pfuetze, Topeka; L. R. Pyle, Topeka; P. T. Schloesser, Topeka; R. N. Shears, Hutchinson; T. E. Young, Winfield.

The Perinatal Welfare Committee has met several times during the past year. We realized the completion of *Standards of Care of Newborns and Prematures in the State of Kansas,* a document designed to delineate environmental and medical treatment and care of infants born in hospitals in Kansas.

This document was printed in the November, 1958, issue of the Journal of the Kansas Medical Society and has been reprinted, bound, and sent to all hospitals in Kansas, the members of the Kansas Academy of General Practice, and to members of the obstetrical and pediatric professions in Kansas. We are in hope that this guide will be utilized in the manner intended by the committee.

Documents concerning the activities of perinatal mortality and morbidity programs in various hospitals have been collected, and a guide to formation of such programs has been prepared and distributed to all hospitals in Kansas with more than 500 deliveries per year and all physicians in Kansas. It is hoped that this will stimulate formation of perinatal mortality committees.

The committee is at present preparing material for a Perinatal Mortality Page to be published in the Journal of the Kansas Medical Society.

The committee will utilize statistics from the Statistical Division of the Kansas State Board of Health, data obtained from birth registrations, as a guide to future activities in the field of perinatal mortality. These statistics are to be compiled and reported at quarterly intervals to the Perinatal Mortality Committee members.

We, the members of the committee; feel that inroads into the establishment of a sound perinatal mortality study program in Kansas have been made and hope that the future committee will see fit to continue the directions of our work.

William H. Crouch, M.D., *Chairman*

Postgraduate Study

W. H. Algie, Kansas City, Chairman; G. E. Burket, Jr., Kingman; M. H. Delp, Kansas City; D. B. Foster, Topeka; S. R. Friesen, Kansas City; D. Lawson, Topeka; E. L. Mills, Wichita; E. J. Ryan, Emporia.

The Committee on Postgraduate Study met April 13, 1958, as a part of the Advisory Committee of the Department of Postgraduate Medical Education of the University of Kansas School of Medicine.

The previous year's postgraduate program at the Medical Center was reviewed at this meeting, and plans were discussed and formulated for the activities for the following year.

In November a letter was sent to all members of the Kansas Medical Society regarding the Kansas circuit course for 1958-1959 presented by the University of Kansas School of Medicine.

This has been the principal activity of the committee this year.

W. H. Algie, M.D., *Chairman*

Relations with Bar Association

K. E. Voldeng, Wellington, Chairman; L. G. Allen, Kansas City; T. R. Hamilton, Kansas City; J. B. Jarrott, Hutchinson; C. R. Rombold, Wichita; E. J. Ryan, Emporia; J. A. Segerson, Topeka; R. E. Stowell, Kansas City; F. E. Wrightman, Sabetha.

The first meeting was held on September 21, 1958, in the offices of the Kansas Medical Society. Those present were: Mr. Ford Harbaugh of Wellington; Mr. Charles Henshall of Garnett; Mr. John Royce of Salina; Mr. Lee E. Weeks of Kansas City; Dr. Karl Voldeng of Wellington, Chairman; Dr. J. B. Jarrott of Hutchinson; Dr. Charles Rombold of Wichita; Dr. J. A. Segerson of Topeka. Also present was Mr. Oliver E. Ebel.

It was deemed advisable to elect an over-all chairman for the combined committees, and Ford Harbaugh was elected to serve for one year in this capacity. Mr. Royce was elected secretary. The major portion of the time was devoted to a discussion of the various fields which the members felt might fall within the scope of this committee. In order to initiate some study and action in these fields, four committees were suggested. At a later date Chairman Harbaugh conferred with Dr. Voldeng and made the following committee appointments:

1. *Committee on Injury Rating*

   Charles Rombold, M.D., Wichita
   John Q. Royce, Salina

2. *Committee on Professional Relations*

   J. A. Segerson, M.D., Topeka
   Charles Henshall, Chanute

3. *Committee on Forms*

Edward Ryan, M.D., Emporia
Lee R. Weeks, Kansas City

4. *Investigating Committee*

Karl Voldeng, M.D., Wellington
Ford Harbaugh, Wellington

A meeting was scheduled for December to hear the report of these committees. However, circumstances involving several members necessitated postponement of this meeting.

This being a new committee, it will probably require some months before any concrete activity can be expected. All members expressed enthusiasm and interest in the possibilities for service to the two professions which the committee might offer.

Karl Voldeng, M.D., *Chairman*

Rural Health

V. E. Brown, Sabetha, Chairman; P. D. Adams, Osage City; J. G. Claypool, Howard; C. S. Davis, Galena; M. F. Frederick, Hugoton; R. E. Grene, LaCrosse; E. J. Grosdidier, Kansas City; H. W. Hiesterman, Quinter; P. H. Hostetter, Manhattan; R. L. Krause, Goessel; L. W. Patzkowsky, Kiowa; D. R. Pierce, Topeka; M. E. Schulz, Russell; R. R. Snook, McLouth; W. L. Speer, Osawatomie; E. F. Steichen, Lenora; C. R. Svoboda, Chapman; M. H. Waldorf, Jr., Greensburg; T. L. Wayland, Nashville; H. O. Williams, Cheney; D. H. Wood, Pittsburg; E. D. Yoder, Denton.

The Rural Health Committee and its advisory group has been very active this year. The National Rural Health Conference was held in Wichita, March 5, 6, and 7. This has required many meetings and many hours of work on the part of many people. The entire committee and several subcommittees have met at many times. The Chairman, with Rueben Dalbec, represented the State Committee and its advisory council at the meeting of the National Rural Health Council in Chicago in early September. Prior to this, there had been several meetings held with the advisory council, searching out subjects of special interest to people of rural Kansas.

During October and November, three meetings of the entire council and the advisory group were held in Topeka, at which time, details of the program were worked out with the cooperation of the National Council. Miss Arlene Hibbard, Executive Secretary of the National Council acted as coordinator and worked out many of the details related to the formation of this program. Our advisory group was composed of individuals representing the Farm Bureau, the Home Demonstration Department of the Kansas State College, the 4-H leaders, the Veterinary Association, the Kansas Council of Churches, the Grange, the Women's Auxiliary of the Kansas Medical Society, the Farm Press and several other organizations. We have had excellent cooperation from all members and attempts were made to contact many other allied groups. The National Rural Health Conference was quite successful and has done much to establish better rapport with some of the influential farm and rural organizations. The state-wide program for immunization against Tetanus has been a special project of the committee.

The chairman and the committee feel that it has been a special privilege this year to have been a part of the National Rural Health Conference. The entire committee believes that now is an ideal time to establish a State Rural Health Council as a semi-fixed organization to meet perhaps once a year to coordinate some of the projects related to health that are constantly a part of Rural American living.

We wish to express our appreciation to all those who contributed time and effort to make the Rural National Health Conference possible.

Virgil E. Brown, *Chairman*

Safety

J. A. Grove, Newton, Chairman; C. M. Barnes, Seneca; K. W. Carbaugh, Mission; F. E. Dillenbeck, El Dorado; A. C. Eitzen, Hillsboro; A. E. Hiebert, Wichita; T. R. Hood, Topeka; C. T. McCoy, Hutchinson; G. R. Peters, Kansas City; H. E. Snyder, Winfield; R. C. Tozer, Topeka; R. P. Weltmer, Beloit.

There have been no formal meetings of this committee the past year.

Recommendations from the past year outlined a broad work program which will need several years work to see results. They were:

1. *Physical Standards for Driver Licensing.* A great deal of material from other states has been secured. In cooperation with the safety director of the Kansas Highway Department a set of standards is being evolved which will be ready for Society consideration and later legislative consideration.

2. *Home Safety.* Again a plea to the Society members to make themselves available to local organizations for talks on home safety.

3. *Ambulance Attendant Training.* Little has been accomplished in this field.

4. *Program at State Meeting on Safety.* This will bear fruit at the Topeka meeting, 1959.

John A. Grove, M.D., *Chairman*

Study of Heart Disease

R. F. Morton, Arkansas City, Chairman; D. R. Bedford, Topeka; E. G. Dimond, Kansas City; C. W. Erickson, Pittsburg; L. H. Leger, Kansas City; P. W. Morgan, Emporia; G. L. Norris, Winfield; L. O. E.

Peckenschneider, Halstead; D. C. Wakeman, Topeka; G. B. Wood, Wichita; F. E. Wrightman, Sabetha.

During the year we have met as a group and we have had several suggestions, including preliminary investigations in regard to the incidence of heart disease in the state and awakening the interest of the group itself in order to stimulate in their own hospitals and adjacent hospitals the course which is to be given to nurses locally in regard to cardiac nursing care.

Some of these programs have been presented in local hospitals and some material has been gathered so that other hospitals and groups desiring to study cardiac nursing care should contact the Kansas Heart Association, 633 Kansas Avenue, Topeka, addressing their inquiry to the executive secretary, Mr. Harold Hunt.

Also it has been suggested that we work out a program where we could contribute some amount of time to the state institutions in a cardiac disease detection and classification program. Dr. George W. Jackson, Director of Institutions, has been contacted, and further meetings along this line will be forthcoming.

Roscoe F. Morton, M.D., *Chairman*

Control of Tuberculosis

J. L. Morgan, Emporia, Chairman; A. L. Ashmore, Wichita; A. Baude, Topeka; R. M. Brooker, Topeka; J. A. Butin, Chanute; R. I. Canuteson, Lawrence; A. M. Cherner, Hays; R. F. Conard, Emporia; J. C. Dowell, Lawrence; M. J. FitzPatrick, Kansas City; J. K. Fulton, Wichita; R. A. Lawson, Chanute; J. M. Mott, Topeka; G. W. Nice, Topeka; R. M. Owensby, Mankato; C. Pokorny, Halstead; J. W. Spearing, Columbus; C. F. Taylor, Norton; P. H. Wedin, Wichita.

The Committee on Control of Tuberculosis has again spent a busy year.

The recommendations made during the previous year regarding changes in the photofluorographic units in the State Board of Health have been followed in a satisfactory manner.

The articles on the current status of tuberculosis which the Committee volunteered to prepare during the previous year are now ready for publication and will be submitted to the Kansas Medical Journal for publication serially and it is our plan that these articles will be bound at a later date and distributed as a pamphlet to the members of the Society. Dr. Martin FitzPatrick has done an admirable job of editing and coordinating these articles. They represent a great deal of work on the part of members of the Committee and they should be of great value to the practicing physicians of the State of Kansas.

Much consideration was given to the problem of supplying drugs to outpatients with tuberculosis. Dr. Roy Lawson surveyed the reports from twenty-eight states and we attempted to devise a program which would be applicable and acceptable for the situation existing in Kansas. Our final recommendation on this major item has not been crystallized and will constitute a major item of unfinished business for the incoming Committee to consider.

The Committee recommended to the House of Delegates that psychiatric services from the Larned State Hospital be made available to the State Sanatorium at Norton. This is being implemented through the offices of Dr. George W. Jackson, Director of Institutions.

The Committee recommended that the State Tuberculosis Sanatorium submit a list of the outpatients formerly seen at Hillcrest to the Kansas State Board of Health for follow-up. This has been done.

The Committee recommended to the Executive Committee of the State Medical Society (in the interests of expediency) that the Board of Health's request for $25,000.00 for the operation of chest clinics be approved.

The feasibility of tuberculin testing was discussed in detail and it was felt at this time we could not reasonably set up a state-wide program for this.

The Committee favored the use of ambulance services to the State Sanatoria for patients who are microscopically positive for tuberculosis.

The Committee reaffirmed its previous stand that the Norton Sanatorium be continued for the purpose for which it was established; namely, the treatment of tuberculosis.

It was the opinion of the Committee that it would not be improper to make the photofluorographic units available for surveys in the institutions under the State Board of Social Welfare.

The problems which this Committee passes on to its successors are: (1) Further consideration of the problem of distribution of antituberculosis drugs; (2) The need and feasibility of establishing and maintaining outpatient clinics for the treatment of tuberculosis.

John L. Morgan, M.D., *Chairman*

Bad driving conditions prevailed in less than 15 per cent of the fatal highway accidents in the United States in 1957.

Nearly 27 per cent of United States drivers involved in 1957 traffic fatalities were under 25 years of age.

More than 21 per cent of 1957 United States highway deaths occurred on Saturdays.

Special Report

Activities of Affiliated Groups and Committees

Blue Shield

In accordance with annual custom, the following constitutes a report by the Blue Shield president to Kansas physicians. Pertinent to this report are discussions of enrollment and finances, major activities of the past year, and some consideration of Blue Shield philosophy.

Enrollment continued to gain, the net increase being 15,097 members. This reasonably satisfactory increase occurred in the face of already large enrollment, and in spite of the vast variety of sickness and disability policies offered by various companies. Total Blue Shield membership at the end of 1958 was 527,375.

Financially, the situation was not quite so satisfactory, but was anticipated. It was necessary to utilize reserves in the amount of $535,924 during 1958. This occurred in spite of some economy in operating expenses. It resulted primarily from the increase in benefits authorized two years ago. Contributing was some increase in usage. Payments to physicians during 1958 amounted to $5,859,205.96. Reserves for case and operating expenses still amount to a healthy 3.26 months' supply, and Blue Shield is in good financial condition. A very slight rate increase was necessary to prevent overusage of reserve funds and to preserve this condition.

Blue Shield activities during the past year have been numerous and constructive. They have resulted from energetic and unselfish efforts by the Board of Trustees, Executive Committee, and staff, aided by the advice and generous assistance of the Kansas Medical Society through its officers, Council, and committees. All major moves have been made only after consultation with the appropriate medical society committee.

The usual efforts have been made to expand enrollment in the basic contracts, Plan A and Plan B. After lengthy discussion with the Fee Committee of the Kansas Medical Society, it was decided to defer, temporarily only, the adaptation of these existing plans to the relative value fee schedule. Comprehensive and major medical contracts are now available to large employee groups. These contracts are relatively expensive, but they are very nearly inclusive in their coverage of medical services on a coinsurance or deductible basis. Thus a further prepayment service is offered to people in these groups. Also now available to groups is a prolonged illness rider, modeled somewhat on the extended benefits rider, but offering coverage for a variety of chronic and often catastrophic illnesses. It is not anticipated that there will be immediate wide usage of these three contracts.

The Lyon County experiment was initiated prior to the recent A.M.A. action on care for the aged. The scope of the experiment embraces only a limited geographic area for a limited period of time. During this time, contract holders who are 65 years old or older will receive without additional charge virtually complete coverage for home and office care, hospital care, home nursing services (by a visiting nurse), laboratory and x-ray services in and out of hospital, and partial drug coverage. Younger contract holders will have visiting nurse service available. The purposes of the experiment are to determine the possible saving which may result from home care as opposed to prolonged hospital care, and to gather as much valid statistical cost and usage data as possible with the objective of ultimate economical prepaid coverage for this older group.

Blue Shield, together with Blue Cross, the Kansas Medical Society, and the Kansas Hospital Association, is participating in an active state-wide study of hospital usage.

In the process of preparation now by Blue Shield and the Kansas Medical Society for submission to the House of Delegates is a plan which is adapted to the relative value fee schedule on a generous dollar for point basis, and which is designed to offer service benefits to a higher percentage of the population, in accordance with the desires of and instructions from the Kansas Medical Society.

In discussing the year's activities of Blue Shield, it is impossible to mention all the minor decisions and adjustments which were made. It is impossible to mention all groups and individuals within the framework of the organization who have contributed time and effort. However, mention should certainly be made of the three Review Committees, which have made a conscientious effort to render fair fee decisions in difficult or unlisted cases.

We would like to feel that the philosophy underlying the Blue Shield structure and operation is identical with the oldest, best, and most ethical philosophy of medical practice. It is a philosophy which places the welfare of the patient first. The plan was designed to help the patient meet the cost of illness; it was designed to be of greatest benefit to the patient who could least afford the cost of such illness. Every phase of Blue Shield activity

should be directed with ultimate patient welfare in mind. To attain this goal, it is necessary that the various plans under Blue Shield be priced within reach of the patient; at the same time, it is necessary that remunerations to physicians be as adequate, fair, and equable as possible. It is impossible to satisfy everyone, but it will be a satisfaction to those responsible for Blue Shield administration if the physicians of Kansas will realize that we have only the above goals in mind.

To attain these goals, it is necessary to keep patients and physicians constantly informed of Blue Shield activities and additions. Information to patients is disseminated by local representatives, by lay members on the Board of Trustees, by Member Council, Farm Bureau, and other meetings, and by printed matter. The informational program for physicians is complex, and hinges upon active cooperation with many other structural units within the framework of the Kansas Medical Society. A brief review of these efforts is pertinent.

In the past year a new joint committee has functioned. Members are the president of the Kansas Medical Society, chairmen of the Fee Committee and the state Blue Shield Relations Committee, president of Blue Shield, and two members of the Blue Shield Executive Committee. Growing out of discussions by this group has been a clear wording of Blue Shield purpose, a clarification of the working arrangements and channels of communication between the Kansas Medical Society and Blue Shield, and a clarification of routes of communication between the individual physician and Blue Shield. These various points will be published in detail elsewhere.

The two Kansas Medical Society committees most actively concerned with Blue Shield are the Relations Committee and the Fee Committee. Both of these groups are constantly and currently informed of any major changes, such as contract details or fee schedules. Not only is this an informational medium; their opinions and advice are frequently sought and always appreciated.

Information is more widely disseminated through meetings with Blue Shield Relations Committees in each councilor district. These meetings are of great value; information reaches the local physician and local opinion reaches Blue Shield. Thirty-four such meetings have been held since the last annual meeting.

This two-way informational exchange takes place through many contacts with individual physicians, physician groups such as county societies and specialty advisory groups, and many other less organized approaches. Printed material is regularly sent to all participating physicians.

The Blue Shield program exists for the welfare of the patient. Inherent in this purpose is a need for sound plans and a constant search for new, effective, and acceptable approaches. Success hinges on physician cooperation, and only informed physicians can be asked to cooperate. Hence, the need for constant informational efforts, so that all physicians may feel that they are a part of the Blue Shield organization.

I want to thank all who have contributed so generously of time and effort during this past year. It has been a privilege to serve as president of Blue Shield.

Edward J. Ryan, M.D., *President*

PHYSICIANS' ACTIVITIES

Dr. Charles K. Wier, Wichita, has been appointed a member of the Committee on Fractures and Traumatic Surgery of the American Academy of Orthopedic Surgeons.

The January-February issue of the *Bulletin of the American College of Surgeons* carried a photograph and story about two Great Bend physicians, **Dr. Marion F. Russell** and his son, **Dr. Homer B. Russell.**

Dr. Ralph E. Bula, Lyons, was speaker at a recent meeting of the Rice County Medical Assistants' Society. He illustrated his talk on travel in the Caribbean Sea with pictures taken on a recent cruise.

Dr. Charles L. Woodhouse, Wichita, has been installed as president of the Cosmopolitan International Club of Wichita.

"Hemolytic Diseases of the Newborn" was the subject discussed by **Dr. Charles P. McCoy, Dr. Russell A. Nelson,** and **Dr. William F. McGuire,** all of Wichita, at the February meeting of the Sedgwick County Medical Assistants' Society.

A feature story in the *Kansas City Star* on Sunday, February 22, described the professional and home life of a husband and wife team of physicians in Garnett, **Dr. Robert L. Stevens** and **Dr. Mildred Julius Stevens.**

Dr. Marvin D. Snowbarger, a 1955 graduate of the University of Kansas School of Medicine, has

opened an office for general practice in Emporia. He recently completed a tour of duty with the Navy.

Dr. J. Warren Jacks, Pratt, is one of three young men who recently received Distinguished Service Awards from the Kansas Junior Chamber of Commerce.

A talk on "Social and Economic Problems in a Physician's Office" was given by **Dr. Norton L. Francis,** Wichita, before the Sedgwick County Medical Assistants' Society at a meeting on March 18.

Dr. Clement C. Vickery, Halstead, discussed public relations as guest speaker at a recent meeting of the Harvey County Medical Assistants' Society in Newton.

Dr. Charles M. Poser has been granted a year's leave of absence from his position as head of the Section of Experimental Neurology at the University of Kansas Medical Center to serve as medical executive officer for the World Federation of Neurology in Antwerp, Belgium. He is taking the position at the request of the National Institutes of Health, Washington.

An article by two Wichita physicians, Dr. William F. Powers and Dr. Cline D. Hensley, was published in the February 7 issue of the *Journal of the American Medical Association*. The title of the paper is "Circulating Blood Volume Changes Incident to Major Orthopedic Surgery."

Dr. W. Clarke Wescoe, dean of the University of Kansas School of Medicine, was speaker at a community dinner at Hays on March 10 promoting the building fund for St. Anthony Hospital.

Dr. John F. Lance, Jr., Wichita, recently became a diplomate of the American Board of Orthopedic Surgery.

Governor George Docking recently announced the appointment of **Dr. Maurice K. Borklund,** Independence, as coroner of Montgomery County.

Plans to move his practice from Axtell to Linn have been announced by **Dr. Salvatore A. Scimeca.**

Dr. Marlin W. Carlson, Ellinwood, who has been ill for several months after suffering a heart attack, has announced his retirement, to be effective on April 1.

ANNOUNCEMENTS

The annual Clendening Lecture at the University of Kansas School of Medicine was delivered by Dr. Edward H. Hashinger, professor emeritus of medicine and gerontology, on March 12. "Arthur E. Hertzler—the Kansas Horse and Buggy Doctor" was the subject of his tribute to the Kansas physician who was on the faculty of the school for over 30 years prior to his death in 1946. The Clendening Series was established in 1949 by the widow of the late Dr. Logan Clendening, also a pioneer in medical education at the Kansas School. Dr. Hashinger, who had residency training in the Halstead, Kansas Hospital founded by Dr. Hertzler, used personal memories in his tribute to the Kansas physician who received international recognition for his best-seller, "The Horse and Buggy Doctor."

Washington University School of Medicine, Division of Gerontology, will conduct its Third Annual Postgraduate Course in Geriatric Medicine, with special emphasis on heart disease and the psychosocial problems of later life, in St. Louis, Missouri, May 21, 22 and 23, 1959. This course will feature outstanding speakers from the St. Louis area and several authorities in the field of geriatrics from other universities. Clinical application of the basic principles of disease in later life will be stressed. The course is tuition-free and Category I credit will be granted to members of the American Academy of General Practice.

For further information address: Division of Gerontology, Washington University School of Medicine, 5600 Arsenal Street, St. Louis 9, Mo.

COUNTY SOCIETIES

Two hundred physicians and their wives and guests were present at the Jayhawk Hotel, Topeka, on March 2 to attend a dinner meeting of the Shawnee County Medical Society. Dr. Franklin D. Murphy, chancellor of the University of Kansas, spoke on "Higher Education" and contrasted the educational system in this country with that in Russia.

A plaque was presented Dr. Milton Miller in recognition of his professional and civic accomplishments during many years of practice in Topeka, the first such award ever given by the society.

Dr. Leonard J. Rader of New York City presented the scientific portion of the program at a meeting of the Sedgwick County Medical Society in Wichita on March 10. Additional speakers were Dr. Thomas P.

Butcher, Emporia, president of the Kansas Medical Society, and Mr. Oliver E. Ebel, Topeka, executive secretary.

For the third consecutive year the society in Sedgwick County is sponsoring the Wichita Science Fair. Dr. Hoyt C. Blaylock, chairman of the committee in charge of the event, is working with the following committee members: Dr. Marion A. Throckmorton, Dr. Eugene G. Anderson, Dr. H. Lee Barry, Dr. J. Walker Butin, Dr. Thomas J. Coleman, Dr. William F. McGuire, Dr. D. Cramer Reed, Dr. G. Gayle Stephens, Dr. Samuel L. Stout, Dr. Ruth S. Taylor, and Dr. Harry J. Wisner, Jr.

The Montgomery County Medical Society has announced the following list of officers to serve during 1959: president, Dr. Albert E. Bair; vice-president, Dr. William T. Read; secretary, Dr. Porter E. Barbera, and treasurer, Dr. Gerald C. Bates. Dr. Read practices in Coffeyville, the others in Independence.

The president and the executive secretary of the Kansas Medical Society, Dr. Thomas P. Butcher of Emporia and Mr. Oliver E. Ebel of Topeka, were speakers at a meeting of the Wyandotte County Medical Society in Kansas City on March 16. Dr. Butcher spoke on "Problems of the Aging" and Mr. Ebel discussed "Legislative Matters of Interest to Your Society."

BOOK REVIEWS

Long-Term Illness. Management of the Chronically Ill Patient. Edited by Michael G. Wohl, M.D. Published by W. B. Saunders Company, Philadelphia. 748 pages, illustrated. Price $17.

This rather bulky volume, too heavy to read in bed, represents the collaboration of 79 contributing authorities and consists of excellent reviews of individual diseases with the exception of the first 90 pages which are of a general nature dealing with such items as "home care, rehabilitation, and nursing procedures."

The individual disease sections covering such disorders as rheumatoid diseases, cardiovascular diseases, endocrine disorders, and the like are excellent. The authors are well chosen and their names are well known to any reader of current medical journals. The individual disease sections actually constitute a detailed survey of current concepts of treatment of these diseases. In this aspect the title of the book is a bit misleading in that it is a treatment manual for many diseases, some of which are not necessarily long-term illnesses.

It is a worthwhile book to have in a hospital or office library to be used in conjunction with other current treatment manuals now on the market. Its virtue lies perhaps in the excellent choice of authors and in the clarity with which treatment regimes are outlined.—*J.L.M.*

Death Notices

Rudolph Theodore Unruh, M.D.

Dr. R. T. Unruh, 59, president of the Edwards County Medical Society, died at the Edwards County Hospital in Kinsley on February 20. He had been ill for three days.

A graduate of the University of Kansas School of Medicine in 1930, Dr. Unruh served at a Mennonite mission in Africa for several years. He then practiced in Halstead until World War II, when he entered the service and was stationed in the Pacific. He had practiced in Kinsley since 1946.

Mrs. Unruh is now serving as president of the Woman's Auxiliary to the Kansas Medical Society.

Lewis David Johnson, M.D.

A physician who had practiced in Chanute 50 years before moving to Kansas City, Missouri, six years ago, Dr. L. D. Johnson, 81, died while on vacation in Santa Ana, California, on March 2.

Dr. Johnson received his medical education at the Denver College of Medicine, completing his work there in 1899. During the period from 1914 to 1951, he headed the staff of the Johnson Hospital in Chanute. He was an honorary member of the Neosho County Medical Society.

Claude William Inge, M.D.

An honorary member of the Cloud County Medical Society, Dr. C. W. Inge, 75, Concordia, died on March 2. After graduation from Barnes Medical College, St. Louis, in 1911, Dr. Inge began practice in Kansas in 1919, opening his office in Formoso. He retired in 1950.

John Donald McCrary, M.D.

Dr. John D. McCrary, 32, who has been practicing obstetrics and gynecology at the Nelson Clinic, Manhattan, was killed in an automobile accident near Florence on March 6. He was a graduate of the University of Nebraska College of Medicine, completing his work there in 1950.

Vascular Surgery. By Geza de Takats, M.D. Published by W. B. Saunders Company, Philadelphia. 726 pages, 382 figures. Price $17.50.

Vascular surgery—long neglected—has recently taken a new and dynamic life. The author states in preface, "I have been borne up by the conviction that it is in the very areas where technical advances are most frequent that there is the greatest need for a statement of fundamental principles. There must remain a home base, a foundation of basic facts which do not change even though their interpretation may have to be modified from time to time."

From there he plunges into the vast seas leading us through the extensive personal experiences that he and his department have traveled. He corrals the huge amount of material into a monograph of four parts and 655 pages.

Part One deals with the basic principles affecting vascular surgery, Part Two with methods of diagnosis, Part Three with vascular syndromes requiring surgical care, and Part Four with surgical technique.

The material is elemental enough to be used as a textbook for the student and resident, and comprehensive enough to be of great value to the surgeon —be he general or specialist. All redundancy has been eliminated.

Parts One and Two are concise and as interestingly written as basic science can be made. Part Three concerning vascular syndromes requiring surgery is the most voluminous. It is well written, liberally illustrated, and quite complete. Part Four on surgical technique is in atlas form, well illustrated, but probably too brief. Dr. de Takats apologizes because the work is a monographic one-man production—but he need not. It has a freshness that is delightful. Ample references show he has considered well the major work done by other investigators and surgeons.

Dr. Gaza de Takats has furnished an outstanding text and guide book that is needed and should be in every medical library.—*G.E.K.*

Anatomy of the Nervous System—Its Development and Function. Tenth Edition. By Stephen Walter Ranson, M.D. Revised by Sam Lillard Clark, M.D. Published by W. B. Saunders Company, Philadelphia. 622 pages, 434 illustrations, 11 in color. Price $9.50.

A comparison between the third edition of this standard textbook of nervous anatomy (1927) and the current tenth edition is instructive. The present edition employs a number of multicolored illustrations, includes the anatomic basis of cerebral arteriography, discusses reverberating circuits within the central nervous system, and includes photographs of electron microscopy. The suppressor zones of the cerebral cortex are described, and cortical autonomic nervous system representation is discussed, to mention just a few of the many advances in typography and neurological knowledge incorporated into the 1959 edition since the earlier edition.

The intent of the late senior author to incorporate sufficient knowledge of the physiology of the nervous system so that the medical student might better understand the structure of the nervous system has been maintained.

This book continues to hold its high standing as a basic textbook in the medical school curriculum. —*D.B.F.*

Medical Advances Affect Hospitals

Medical advances not only influence the community's total hospital bill but also affect the community's utilization of hospitals, Ray E. Brown, superintendent, University of Chicago Clinics, said today.

"In the first place, these medical advances now permit doctors to offer treatment to patients whose condition was classified as hopeless and incurable a few years ago. These patients represented no expense to the prepayment plans because there was no treatment for them," Mr. Brown said.

"If one reviews the average hospital's census today it is likely that a goodly per cent of the patients will be undergoing therapy that was unknown just a few years ago. Much of this new therapy is difficult and of long duration.

"The effort on behalf of these patients consumes an increased number of more costly hospital days that represent a net addition to the pay-out total of the community's prepayment plan," he said.

Increased specialization by physicians has followed the medical progress of recent years, according to Mr. Brown. Doctors have had to restrict their areas of study in order to keep pace with medical developments, he said.

"Specialists are in general the largest users of hospital facilities for the same reason they are specialists. The rate of increase in medical specialists can therefore serve as a sort of index to the rate of increase in the utilization of hospital facilities," Mr. Brown pointed out.

Mr. Brown mentioned that it is difficult to answer the question of whether some patients with prepayment overuse the hospital. "The essential question in this connection is not concerned with whether those with prepayment coverage used more hospital care. If prepayment is serving any social purpose at all it would be expected that its members would have had better financial access to hospital care," he said.

Medical items not covered by prepayment, such as prescription sales, have increased tremendously during the past ten years, and thus offer some evidence that the public is interested in health care "for its own sake and not as a means of beating the prepayment game," he said.

The Kansas Medical Society—1958-1959

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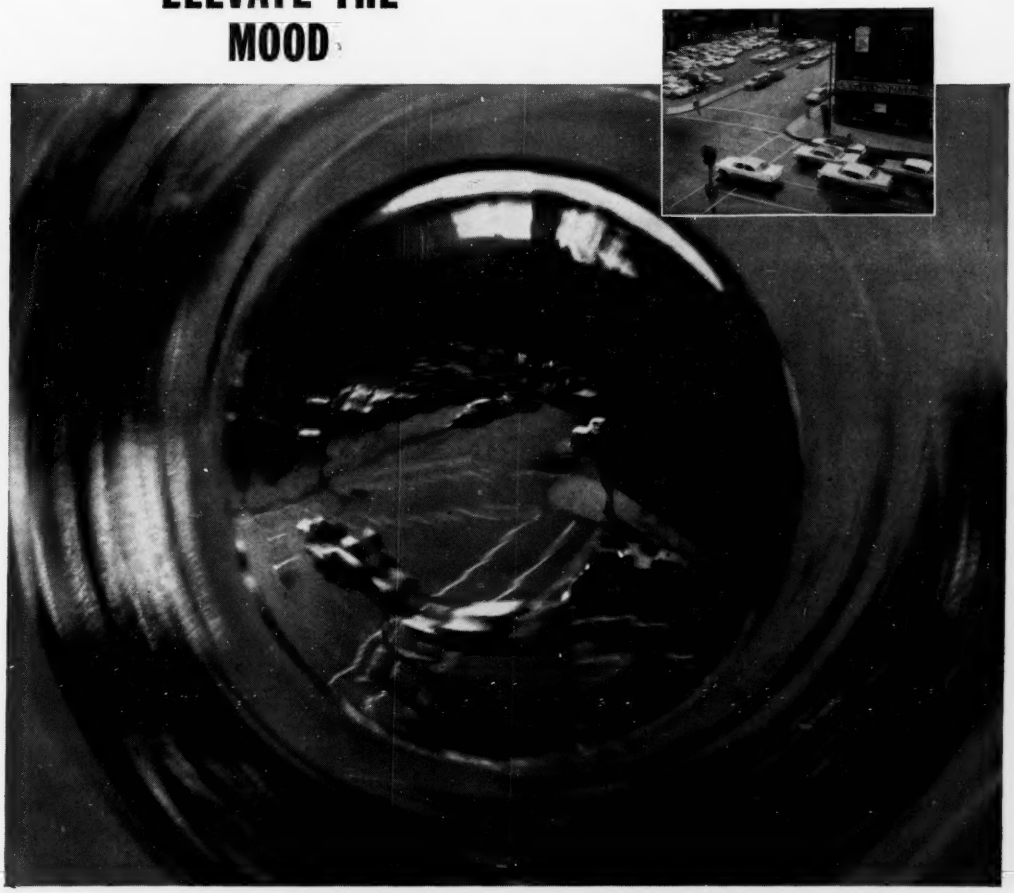
Wilson		C. E. Stevenson, Neodesha
Woodson	A. C. Dingus, Yates Center	H. A. West, Yates Center
Wyandotte	M. R. Fitzpatrick, Kansas City	Wray Enders, Kansas City

CONTROL VERTIGO, DIZZINESS... AND ELEVATE THE MOOD



with **Dramamine-*D*®**

brand of dimenhydrinate with dextro-amphetamine sulfate

"Disturbances of balance resulting from vestibular disorders have long been known to lead to severe anxiety."*

Vertigo—whether of organic or functional origin—tends to leave depression in its wake. Dramamine-*D* is a therapeutic combination designed for treatment of the entire vertigo-reaction syndrome. Each tablet contains dimenhydrinate (50 mg.) to control dizziness, and dextro-amphetamine sulfate (5 mg.) to elevate the mood.

*Pratt, R. T. C., and McKenzie, W.: Anxiety States Following Vestibular Disorders, Lancet 2:347 (Aug. 16) 1958.

Dramamine® available as tablets, ampuls, liquid, suppositories

Research in the Service of Medicine SEARLE

SPONTIN IN SERIOUS

A Special Report from Abbott to the Medical Profession on a Year's Clinical Experience with SPONTIN®

(Ristocetin, Abbott)

In a Spanish province, a patient lay dying of endocarditis. A short wave radio appeal for SPONTIN was intercepted by a Baltimore physician. The antibiotic was immediately flown to this faraway land, and 10 days later—the patient had recovered.

In Chicago, a moribund patient had been administered 18 combinations of 10 different antibiotics without success. Involved was a hospital-acquired staphylococcal pneumonia—plus complications. SPONTIN was substituted and the patient lived.

A five-week-old infant was critically ill with staphylococcal enteritis. Treatment failures included erythromycin and chloramphenicol. Three days of SPONTIN saved this life. The list is long and impressive and it grows daily.

Recently, a study[1] was made of serious and resistant staphylococcal infections reported to Abbott Laboratories. Many of these cases had serious complicating diseases—many were moribund, or almost so, at the time SPONTIN was started. Yet, out of the 160 staphylococcal cases studied, 93 were reported cured and 38 improved after the administration of SPONTIN.

Out of the total of 251 patients with severe infections caused by gram-positive or mixed organisms, 149 were reported cured and 53 others improved. And the record for pediatric practice was every bit as good.

Additionally, SPONTIN continues to exhibit exceptional bactericidal activity against coccal infections[2]. And, according to another study, SPONTIN provides successful short-term therapy in endocarditis[3].

Only last October, at the Antibiotics Symposium in Washington, D. C., a panel of six leading antibiotic experts placed SPONTIN at the top of all other commercially-available antibiotics for treating serious staphylococcal infections. Also, six papers—all dealing with the effectiveness of ristocetin (SPONTIN®) in treating staphylococcal infections—were presented at the Symposium.

One of the most encouraging aspects of the year's literature on SPONTIN is the increasing testimony to its safety. As the months have passed and cases have accumulated by the hundreds, it has become apparent that careful attention to dosage recommendations has practically eliminated toxicity and side effects as serious obstacles to therapy. Also, recent improvements have been made in the manufacture of SPONTIN; the drug is now made from pure crystals.

A recent report[4] in the Journal of the American Medical Association concluded, "It is our opinion that, if proper precautions are observed, ristocetin is a [well tolerated] and potent agent to employ in the treatment of staphylococcal infections." And in another study, after successfully treating 28 patients with a variety of staphylococcal infections, the authors reported[5], "No serious complications were noted."

Few more dramatic records have been written in such a short space of time. SPONTIN has proved itself to be a good answer, perhaps the best answer at present, to the resistant staphylococcal problem—and of real value in other serious coccal infections. It may well be your answer when you're confronted with a serious infection.

Abbott

901066

STAPHYLOCOCCAL INFECTIONS

Excerpts from Reports Read at the Antibiotics Symposium

Spontin In Treating Severe Respiratory Infections—"In 13 of 20 patients the results were excellent, with clinical response being evident within one to four days after institution of therapy. In three additional patients, there was some degree of improvement in pneumonic processes superimposed on tuberculosis in two cases and on pulmonary neoplasm in one. In all other cases, serious antecedent pathology undoubtedly influenced the negative or equivocal response to ristocetin therapy.[6]"

Spontin In Treating Staphylococcal Infections—After successfully treating 28 patients, the authors wrote, "Ristocetin or Spontin has proved to be bactericidal and bacteriostatic, particularly for the *Staphylococcus aureus,* which is often resistant to many other antibiotics.[5]"

Spontin In Treating Seven Difficult Cases—"Ristocetin has produced excellent results in eradicating, mitigating or preventing infection in seven selected difficult cases. Six of the seven cases involved *Staphylococcus aureus* which did not respond to chemotherapy with other antibiotics.[7]"

Spontin Blood Levels In Children—"Ristocetin was administered as a single intravenous injection of 12.5 milligrams per kilogram. This resulted in serum levels ranging from 1.3 to 10.6 mcg. after two hours with a gradual fall to a level of 0.7 mcg. per cubic centimeter or less after 12 hours.[8]"

Spontin In Treating Staphylococcal Pneumonia—"Ristocetin was used in the treatment of 24 patients with staphylococcal pneumonia, 17 of whom had failed to respond to previously administered antibiotics. Complete clearing of pneumonitis was obtained in 16 patients and significant improvement occurred in two others. Two patients died of pneumonia; four others succumbed to other lethal diseases.[9]"

Spontin In Treating Children and Adults—"Ristocetin completely controlled severe staphylococcal infections in 11 adults and six children who received adequate therapy.[10]"

1. Totals represent published reports and personal communications to Abbott Laboratories.
2. Sixth Annual Symposium on Antibiotics, Washington, D. C., Oct. 15, 16, 17, 1958.
3. Romansky, M. J., and Holmes, R., Successful Short-Term Therapy of Enterococcal and Staphylococcal Endocarditis with Ristocetin–Seven Patients. Preliminary Report, Antibiotics Annual, 1957-58, p. 187.
4. J. A. M. A., 167:1584, July 26, 1958.
5. Bush, L. F., et al., The Use of Ristocetin (Spontin) in Staphylococcal Infections, In Press, Antibiotics Annual, 1958-59.
6. Billow, F. J., et al., Clinical Observations on Ristocetin–A Preliminary Report on its Efficacy and Toxicity in 20 Unselected Severe Respiratory Infections, In Press, Antibiotics Annual, 1958-59.
7. Miller, J. M., et al., Ristocetin in the Treatment of Seven Selected Difficult Cases, In Press, Antibiotics Annual, 1958-59.
8. Asay, L. D., et al., Ristocetin Serum Levels in Children, In Press, Antibiotics Annual, 1958-59.
9. Schumacher, L. R., et al., Experiences with Ristocetin in Staphylococcal Pneumonia: Observations in 23 Cases, In Press, Antibiotics Annual, 1958-59.
10. Terry, R. B., Ristocetin in Children and Adults, In Press, Antibiotics Annual, 1958-59.

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CLINICAL BRIEFS
FOR MODERN PRACTICE

How can the problem of "postcholecystectomy syndrome" be reduced?

A "routine" operative cholangiogram is now recommended in addition to thorough surgical exploration, reducing the number of cholecystectomized patients later presenting the same symptoms as before the operation.

Source: Vazquez, S. G.: J. Internat. Coll. Surgeons *28*:394, 1957.

for pre- and postoperative management of biliary tract disorders... **DECHOLIN®** *"therapeutic bile"*

*Hydro*choleresis with DECHOLIN combats bile stasis by flushing the biliary tract with dilute, natural bile...

- corrects excessive bile concentration
- helps to thin gallbladder contents
- benefits patients with chronic cholecystitis, noncalculous cholangitis, and biliary dyskinesia

in functional G.I. distress... **DECHOLIN®** with **BELLADONNA**

- reliable spasmolysis
- improved liver function

available: DECHOLIN Tablets: (dehydrocholic acid, AMES) 3¾ gr. (250 mg.). Bottles of 100, 500 and 1,000; drums of 5,000.

DECHOLIN with Belladonna Tablets: (dehydrocholic acid, AMES) 3¾ gr. (250 mg.) and extract of belladonna ⅙ gr. (10 mg.). Bottles of 100 and 500.

60659

AMES
COMPANY, INC
Elkhart • Indiana
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In the Treatment of Rheumatic Disorders Greater stability of maintenance dosage minimizes risks of hormonal imbalance

In Sterazolidin, the anti-inflammatory actions of prednisone and Butazolidin* are combined to permit lower effective dosage of each. Clinical experience has indicated that patients can be well maintained on this combination over prolonged periods with relatively low, stable dosage levels of each component, thus minimizing the problems arising from excessively high doses of corticosteroids. Other side effects have also been gratifyingly few. Antacid and spasmolytic components are contained in Sterazolidin capsules for the benefit of patients with gastric sensitivity.

Sterazolidin®: Each capsule contains prednisone 1.25 mg.; phenylbutazone 50 mg.; dried aluminum hydroxide gel 100 mg.; magnesium trisilicate 150 mg.; homatropine methylbromide 1.25 mg.

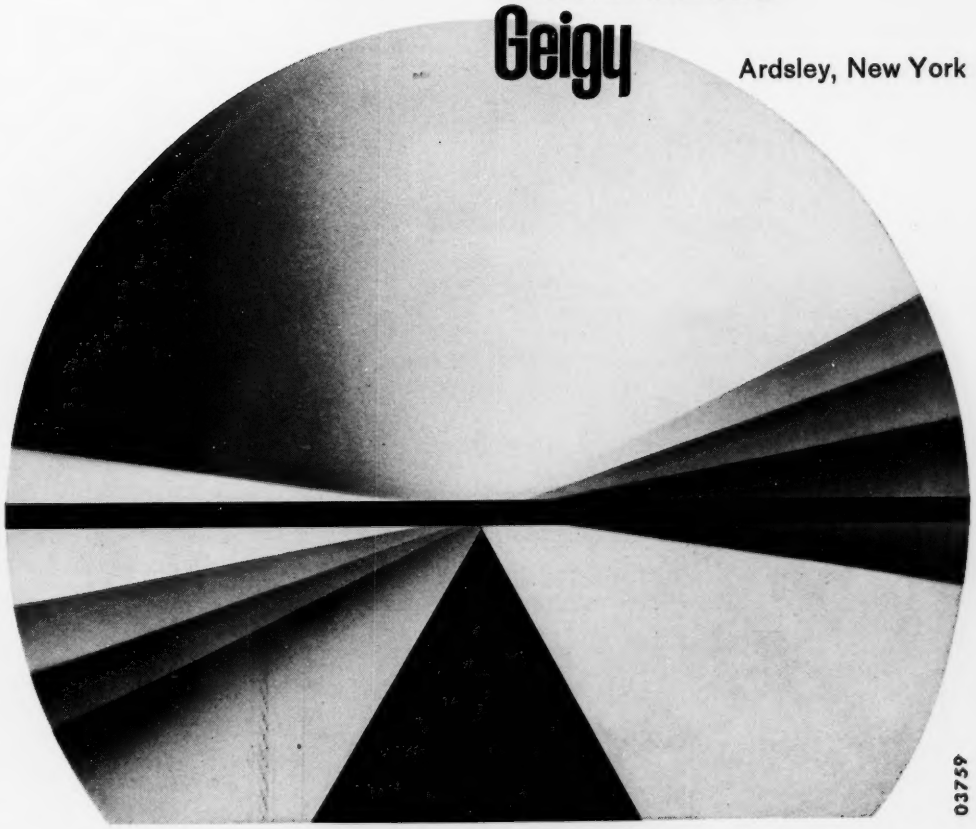
Detailed information available on request.

*Geigy's trademark for phenylbutazone—Reg. U. S. Pat. Off.

new Sterazolidin® Capsules

prednisone-phenylbutazone, Geigy

Geigy Ardsley, New York



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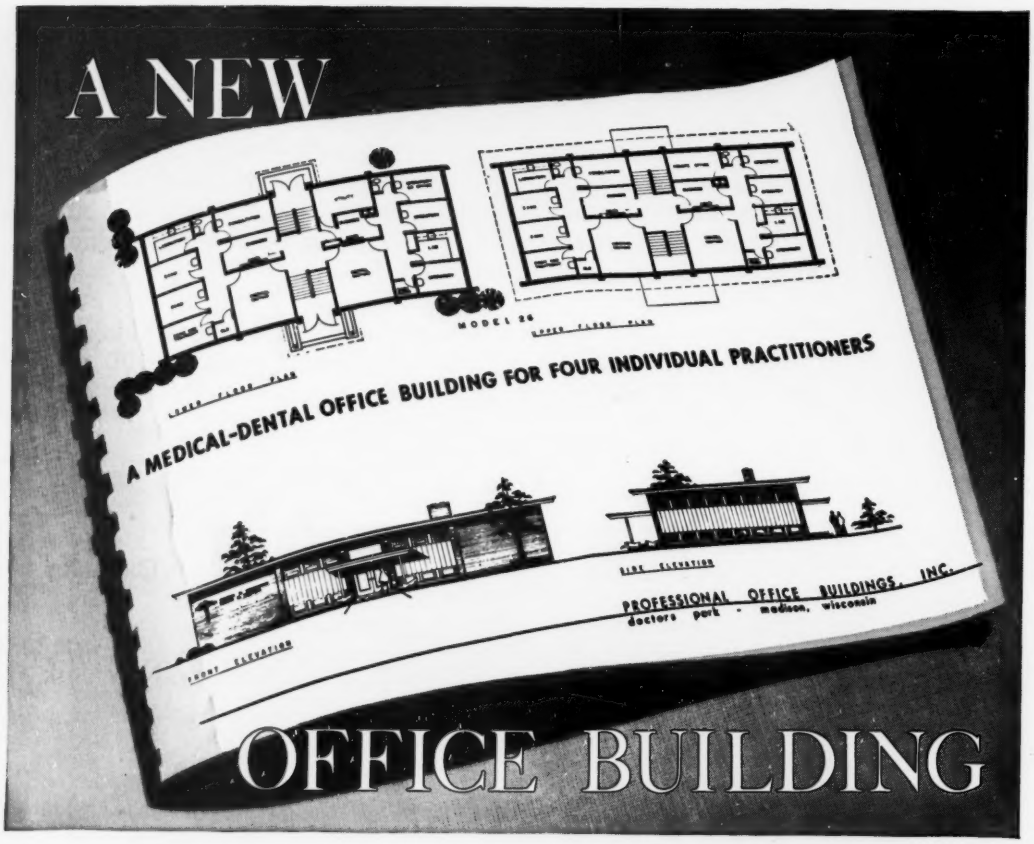
IF YOU ARE PLANNING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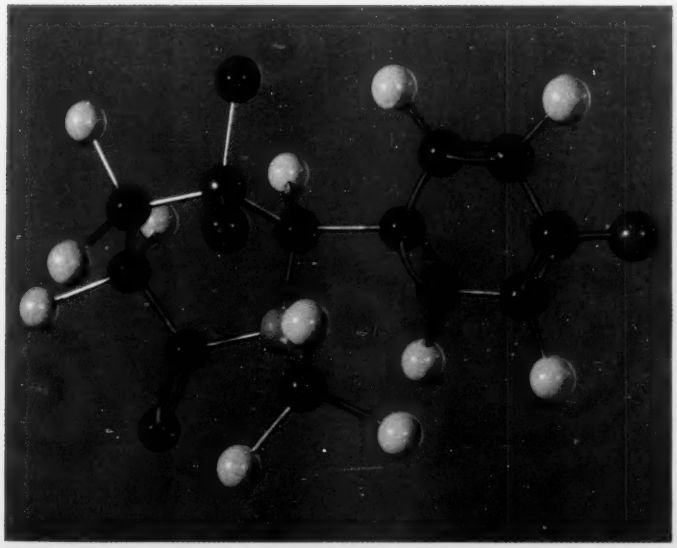
Trancopal®

*the first true tranquilaxant**

***Potent* MUSCLE RELAXANT**

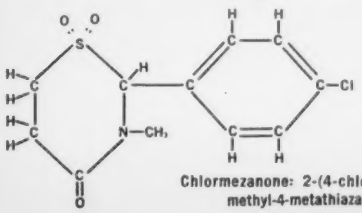
***...Equally effective as a* TRANQUILIZER**

***tran-qui-lax-ant** (tran'kwi-lak'sant) [< L. tranquillus, quiet; L. laxare, to loosen, as the muscles]



Trancopal, a major development of Winthrop research, is a new orally administered nonhypnotic central relaxant and tranquilizer. It relieves muscle spasm in a variety of musculoskeletal and neurologic conditions and also exerts a marked tranquilizing effect in anxiety and tension states.

Unrelated chemically to any other drug in current use, Trancopal offers a completely new major chemical contribution to therapeutics.



Chlormezanone: 2-(4-chlorophenyl)-3-methyl-4-metathiazanone-1-dioxide

Thoroughly evaluated clinically...

Clinical studies of 4092 patients by 105 physicians[1] have demonstrated that Trancopal often is effective when other drugs have failed. From these studies it is evident that Trancopal can provide more help for a greater number of tense, spastic, and/or emotionally upset patients than can any other chemotherapeutic agent in current use.

In musculoskeletal conditions[1]

effective in **91%** of patients

INDICATIONS

- Low back pain (lumbago)
- Bursitis
- Osteoarthritis
- Fibrositis
- Myositis
- Postoperative myalgias
- Neck pain (torticollis)
- Rheumatoid arthritis
- Disk syndrome
- Joint disorders (ankle sprain, tennis elbow, etc.)

By relieving muscle spasm and pain, Trancopal permits early and active purposeful exercise and physical therapy to accomplish maximal benefits for rapid recovery.

Trancopal

Dosage: One Caplet (100 mg.) orally three or four times daily. Relief of symptoms occurs in fifteen to thirty minutes and lasts from four to six hours.

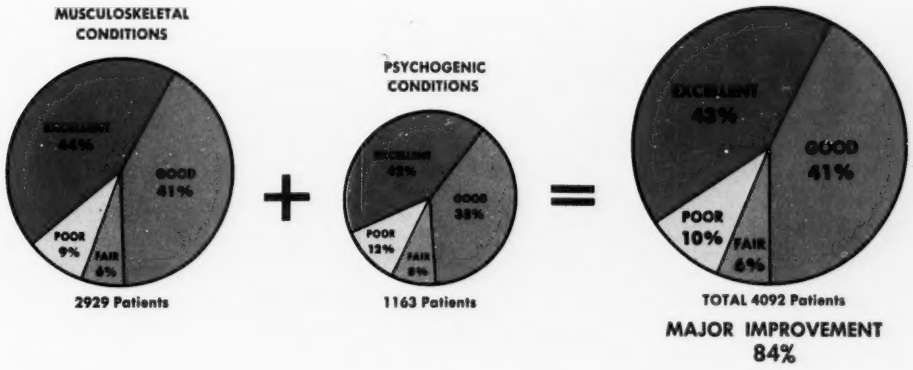
In anxiety and tension states[1]

effective in 88% of patients

INDICATIONS

Anxiety and tension states	Dysmenorrhea
Premenstrual tension	Asthma
Emphysema	Angina pectoris

Because of its exceptional calmative property, Trancopal "...allows the patient to use his energies in a more productive manner in overcoming his basic problem."[2]



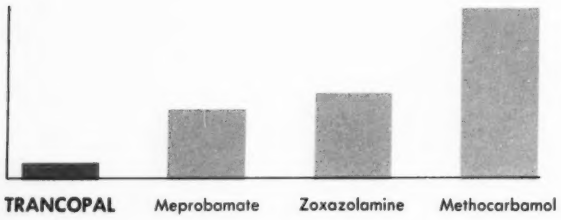
Of the total patients treated, Trancopal produced excellent results in 43 per cent, good results in 41 per cent, fair results in 6 per cent, and poor results in 10 per cent.

Better tolerated and safer than older drugs[3]

With Trancopal there is no clouding of consciousness, no euphoria or depression. Even in high dosage, there is no perceptible soporific effect. Because it does not irritate gastric mucosa, it can be taken without regard to mealtimes. Administration does not hamper work — or play. There are no known contraindications. Blood pressure, pulse rate, respiration and digestive processes are unaffected by therapeutic dosage.
Toxicity is extremely low. And Trancopal has a lower incidence of side effects than has zoxazolamine, methocarbamol or meprobamate.

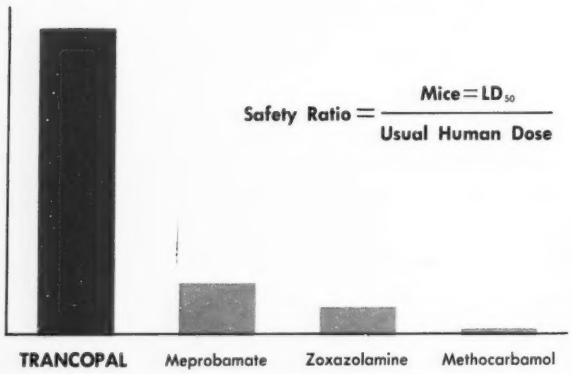
Comparison with 3 widely used central relaxants

When compared with three widely used central relaxants for activity, safety and clinical effectiveness, Trancopal offers definite desirable advantages.



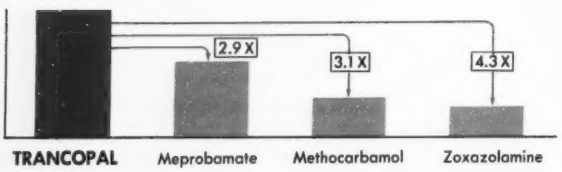
for activity

In the usual human dose, Trancopal is four to ten times as potent per milligram.



for safety

Comparative pharmacologic tests showed that Trancopal is up to thirteen times as safe or up to thirteen times less toxic. The measure of safety was the LD_{50} in mice/usual human dose.



for clinical effectiveness

A clinical comparison in low back pain, torticollis, bursitis and anxiety states showed that Trancopal is up to four times as effective. Each of the 40 patients received all four drugs in random rotation for several days. Although each of the four gave some relief, only the one providing the most effective relief was recorded.

Supplied: Trancopal Caplets® (scored) 100 mg., bottles of 100.

References: 1. Cooperative Study, Department of Medical Research, Winthrop Laboratories. • 2. Gans, S.E.: To be published. • 3. Lichtman, A.L.: Kentucky Acad. Gen. Pract. J. 4:28, Oct., 1958.

the first true tranquilaxant

Trancopal

Potent
MUSCLE RELAXANT
...Equally effective as a
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Winthrop Laboratories / New York 18, New York

Trancopal (brand of chlormezanone) and Caplets, trademarks reg. U. S. Pat. Off.

Printed in U. S. A. 3-59 (4027)

running noses and open stuffed noses orally

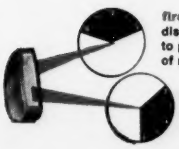
with TRIAMINIC, the oral nasal decongestant

- in nasal and paranasal congestion
- in sinusitis
- in postnasal drip
- in allergic reactions of the upper respiratory tract

safer and more effective than topical medication

- reaches *all* respiratory membranes systemically
- avoids "nose drop addiction"
- presents no problem of rebound congestion
- provides longer-lasting relief

Relief with Triaminic is prompt and prolonged because of this special timed-release action . . . beneficial effect starts in minutes, lasts for hours.


first—the outer layer dissolves within minutes to produce 3 to 4 hours of relief
then—the inner core disintegrates to give 3 to 4 more hours of relief

Each* TRIAMINIC *Tablet provides:

Phenylpropanolamine HCl . . .	50 mg.
Pheniramine maleate	25 mg.
Pyrilamine maleate	25 mg.

One-half of this formula is in the outer layer, the other half is in the core.

Dosage: One tablet in the morning, mid-afternoon and in the evening, if needed.

Triaminic®

Also available: For the occasional patient who requires only half dosage: timed-release TRIAMINIC JUVELETS. Each Juvelet is equivalent to ½ of a Triaminic Tablet.

For those patients who prefer liquid medication: TRIAMINIC SYRUP. Each 5 ml. tsp. of this palatable syrup is equivalent to ¼ of a Triaminic Tablet.

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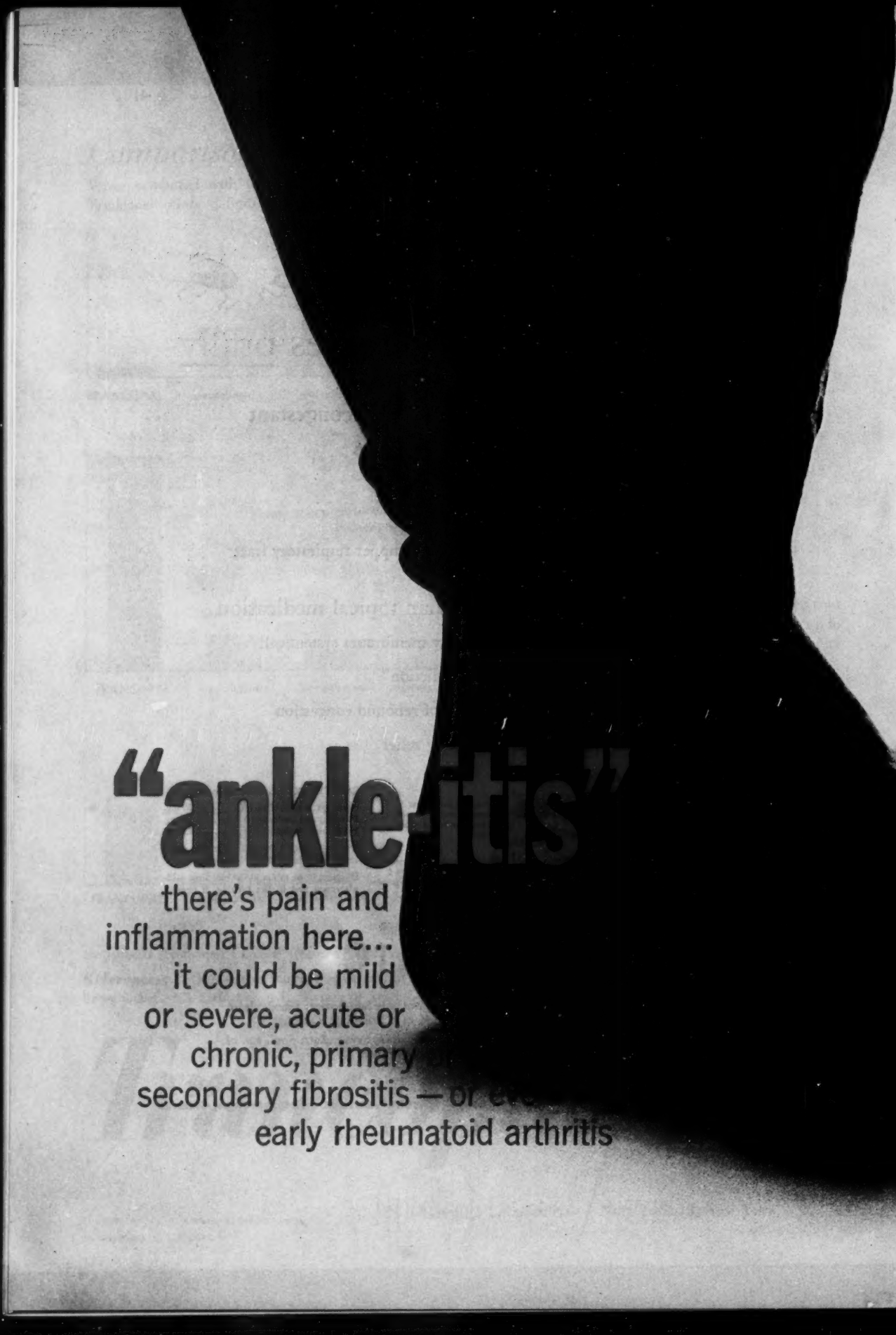
"ankle-itis"
there's pain and
inflammation here...
it could be mild
or severe, acute or
chronic, primary
secondary fibrositis — or
early rheumatoid arthritis

more potent and comprehensive treatment than salicylate alone

. . . assured anti-inflammatory effect of low-dosage corticosteroid[1] . . . additive antirheumatic action of corticosteroid plus salicylate[2-5] brings rapid pain relief; aids restoration of function . . . wide range of application including the entire fibrositis syndrome as well as early or mild rheumatoid arthritis

more conservative and manageable than full-dosage corticosteroid therapy—

. . . much less likelihood of treatment-interrupting side effects[1-6] . . . reduces possibility of residual injury . . . simple, flexible dosage schedule

THERAPY SHOULD BE INDIVIDUALIZED

acute conditions: Two or three tablets four times daily. After desired response is obtained, gradually reduce daily dosage and then discontinue.

subacute or chronic conditions: Initially as above. When satisfactory control is obtained, gradually reduce the daily dosage to minimum effective maintenance level. For best results administer after meals and at bedtime.

precautions: Because SIGMAGEN contains prednisone, the same precautions and contraindications observed with this steroid apply also to the use of SIGMAGEN.

in any case it calls for

Sigmagen®

corticoid-salicylate compound tablets

Composition

METICORTEN® (prednisone)	0.75 mg.
Acetylsalicylic acid	325 mg.
Aluminum hydroxide	75 mg.
Ascorbic acid	20 mg.

Packaging: SIGMAGEN Tablets, bottles of 100 and 1000.

References: 1. Spies, T. D., et al.: J.A.M.A. 159:645, 1955. 2. Spies, T. D., et al.: Postgrad. Med. 17:1, 1955. 3. Gelli, G., and Della Santa, L.: Minerva Pediat. 7:1456, 1955. 4. Guerra, F.: Fed. Proc. 12:326, 1953. 5. Busse, E. A.: Clin. Med. 2:1105, 1955. 6. Sticker, R. B.: Panel Discussion, Ohio State M. J. 52:1037, 1956.

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re-evaluating tranquilizers?

READ WHAT CLINICIANS ARE NOW SAYING ABOUT ATARAX®

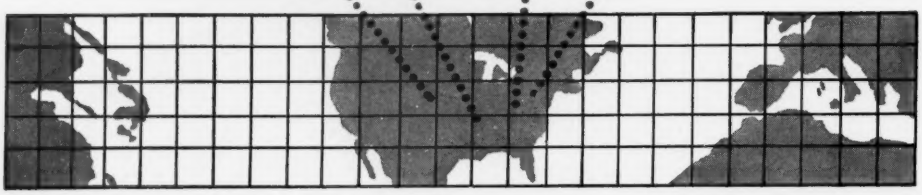
(brand of hydroxyzine)

IN GERIATRICS
"ability to decide correctly has increased, while the illogical response to anxiety has diminished."[1]

IN WORKING ADULTS
"especially well suited for ambulatory patients who must work, drive a car, or operate machinery."[5]

IN PEDIATRICS
"ATARAX appeared to reduce anxiety and restlessness, improve sleep patterns and make the child more amenable to the development of new patterns of behavior . . ."[2]

IN GENERAL
ATARAX is "effective in controlling tension and anxiety . . . . Its safety makes it an excellent drug for out-patient use in office practice."[4]



INVESTIGATORS AGREE ON OPTIMAL ATARAX DOSAGES

For childhood behavior disorders	10 mg. tablets	3-6 years, one tablet t.i.d. over 6 years, two tablets t.i.d.
	Syrup	3-6 years, one tsp. t.i.d. over 6 years, two tsp. t.i.d.
For adult tension and anxiety	25 mg. tablets	one tablet q.i.d.
	Syrup	one tbsp. q.i.d.
For severe emotional disturbances	100 mg. tablets	one tablet t.i.d.
For adult psychiatric and emotional emergencies	Parenteral Solution	25-50 mg. (1-2 cc.) intramuscularly, 3-4 times daily, at 4-hour intervals. Dosage for children under 12 not established.

Supplied: Tablets, bottles of 100. Syrup, pint bottles. Parenteral Solution, 10 cc. multiple-dose vials.

References: 1. Smigel, J. O., et al.: J. Am. Ger. Soc., in press. 2. Freedman, A. M.: Pediat. Clin. North America 5:573 (Aug.) 1958. 3. Ayd, F. J., Jr.: New York J. Med. 57:1742 (May 15) 1957. 4. Menger, H. C.: New York J. Med. 58:1684 (May 15) 1958. 5. Coirault, M., et al.: Presse méd. 64:2239 (Dec. 26) 1956. 6. Bayart, J.: Presented at the International Congress of Pediatrics, Copenhagen, Denmark, July 22-27, 1956.

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Science for the World's Well-Being

new 3-way build-up for the under par child...

Improve appetite and energy
with ample amounts of vitamins—B_1, B_6, B_{12}.

strengthen bodies with needed protein
Through the action of l-Lysine, cereal and other low-grade protein foods are up-graded to maximum growth potential.

discourage nutritional anemia
with iron in the well-tolerated form of ferric pyrophosphate.

new

INCREMIN®

Lysine-Vitamins

WITH IRON SYRUP

delicious cherry flavor— no unpleasant aftertaste

Average dosage is 1 teaspoonful daily. Available in bottles of 4 and 16 fl. oz.

Each teaspoonful (5 cc.) contains:

l-Lysine HCl	300 mg.
Vitamin B_{12} Crystalline	25 mcgm.
Thiamine HCl (B_1)	10 mg.
Pyridoxine HCl (B_6)	5 mg.
Ferric Pyrophosphate (Soluble)	250 mg.
Iron (as Ferric Pyrophosphate)	30 mg.
Sorbitol	3.5 Gm.

LEDERLE LABORATORIES. a Division of AMERICAN CYANAMID COMPANY, Pearl River, New York Lederle

B. I. D.

ULCER CONTROL

all day

NEW

DARICON*

oxyphencyclimine hydrochloride

TABLETS

all night

patient comfort

Natural Prolonged Action–The action of DARICON, a more potent and better tolerated anticholinergic, is consistently prolonged because it has a unique chemical structure and is not dependent on "mechanical" means (e.g., special coating, adsorption on ion-exchange resin).

In addition to peptic ulcer, DARICON is also indicated for other gastrointestinal disorders characterized by hypersecretion, hypermotility and spasm (e.g., functional bowel syndrome, chronic nonspecific ulcerative colitis and biliary tract disease).

Dosage: 10 mg. b.i.d. (morning and evening). **Supply:** Tablets, 10 mg., white, scored. Bottles of 60 and 500.

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Pfizer Science for the world's well-being

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. . . and one to grow on

A tiny tablet of REDISOL to stimulate the appetite – to help in the intake of food for growth.

REDISOL is crystalline vitamin B_{12}, an essential vitamin for growth and the fundamental metabolic processes.

Ideal for the growing child, the REDISOL tablet dissolves instantly on contact in the mouth, on food or in liquids.

Packaged in bottles hermetically sealed to keep the moisture out and to retain vitamin potency in 25 and 50 mcg. strengths, bottles of 36 and 100 – in 100 mcg. strength, bottles of 36, and in 250 mcg. strength, vials of 12.

Also available as a pleasant-tasting cherry-flavored elixir (5 mcg. per 5-cc. teaspoonful) and as REDISOL injectable, cyanocobalamin injection USP (30 and 100 mcg. per cc., 10-cc. vials and 1000 mcg. per cc. in 1, 5 and 10-cc. vials).

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as they like it...

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syrup pediatric drops

as they need it...

ACHROMYCIN® V

Tetracycline with Citric Acid Lederle

- broad spectrum control of more than 90 per cent of antibiotic-susceptible infections seen in general practice[1]
- fast, high concentrations in body fluids and tissues
- no irreversible side effects reported, excellently tolerated
- readily miscible in water, juices, formula.

ACHROMYCIN V: 10 cc. plastic dropper bottle for precise dosage; 100 mg. per cc. (20 drops). *Dosage:* one drop per pound body weight per day.

ACHROMYCIN V Syrup: Each teaspoonful (5cc.) contains equiv. 125 mg. tetracycline HCl. Bottles of 2 and 16 fl. oz. *Dosage:* at 45 lbs., one teaspoonful 4 times daily; adjust for other weights.

1. *Based on six-month National Physicians Survey.*

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Reasons for Failure:

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REFERENCES: 1. Adams, J.: Advantages of combined tetracycline-oleandomycin therapy in common infections, J. Tennessee M. Assoc. *50*:446 (Nov.) 1957. 2. Andersson, B.: Pulmonary abscess cured with antibiotics, Opuscula Medica, *2*:8 (Oct.) 1957. 3. Anello, V. J., and Gerschenfeld, D. S.: Staphylococcal septicemia in a child: Treatment with a combination of oleandomycin and tetracycline, Dia med., B. Air. *30*:1921 (July 28) 1958. 4. Arneil, G. C.: Tetracycline-oleandomycin treatment of acute respiratory disease in childhood, paper read at Sixth Annual Symposium on Antibiotics, Washington, D. C., October 1958, to be published. 5. Arrigoni, G.; Grignani, G. C., and Varesi, M.: A new antibiotic association in the treatment of urologic infections, Minerva med. *48*:2701 (Aug. 25) 1957. 6. Baccaredda Boy, A., and Cappelli, E.: Clinical study of the activity of a new antibiotic preparation, Signemycin, in skin conditions of infectious (pyogenous) origin, Minerva med. *48*:2690 (Aug. 25) 1957. 7. Bergdahl, U.: Clinical experiences with a so-called double-spectrum antibiotic, Signemycin, Svenska Lakartidningen *55*:1715, 1958. 8. Blundi, E.: Use of Signemycin in a chest clinic, to be published. 9. Bolognesi, C.: Preliminary results of the use of Signemycin in certain otorhinolaryngological infections due to pyogenic organisms, Minerva med. *48*:2693 (Aug. 25) 1957. 10. Brodhage, H.: Bakteriologische in-vitro-versuche mit einer kombination von tetracyclin and oleandomycin (Signemycin), Praxis *26*:579, 1957. 11. Calvi, A.: Antibiotics in the therapy of influenza and its pulmonary complications, to be published. 12. Carter, C. H., and Maley, M. C.: Application of tetracycline-oleandomycin in clinical practice, Antibiotics Annual 1956-57, New York, Medical Encyclopedia, Inc., 1957, p. 51. 13. Castellanos, A.: Signemycin in pediatrics, to be published. 14. Chiappara, P.: A case of sepsis with multiple osteomyelitis treated with a new antibiotic, Minerva med. *48*:2697 (Aug. 25) 1957. 15. Chiarenza, A.: Observations on the effects of Signemycin in nongonococcic urethritis, Minerva med. *48*:2692 (Aug. 25) 1957. 16. Cimmino, A.; Boni, A., and Orsi, N.: Antibiotic activity of oleandomycin-tetracycline combination. *In vitro* study on 332 strains of *Micrococcus pyogenes* var. *aureus* clinically isolated. Antibiotics Annual 1957-1958, New York, Medical Encyclopedia, Inc., 1958, pp. 708-715. 17. Cooper, J.; Sprogis, G. R.; Heinemann, M., and Feirer, G. M.: Therapy of amebiasis carriers with oleandomycin-tetracycline (Signemycin), Antibiotic M. *5*:302 (May) 1958. 18. Cornbleet, T., and Firestein, B. Z.: Use of oleandomycin-tetracycline (Signemycin) for acne, Antibiotic M. *4*:598 (Oct.) 1957. 19. Cupples, J. F. B., and Perry, A. W.: Acute staphylococcal endocarditis treated with tetracycline-oleandomycin successfully, Canad. M. Assoc. J. *77*:699 (Oct.) 1957. 20. Davis, W. G.: Report on tetracycline and oleandomycin used in combination. Clinical Review & Research Notes, *1*:21-23 (April) 1958. 21. DeRomana, J.; Zaldivar, C., and Falcone, F.: Actual therapeutic conduct in the treatment of osteomyelitis, paper read at Sixth Annual Symposium on Antibiotics, Washington, D. C., Oct. 1958, to be published. 22. Durrieu, C. A.; Rodriguez, J. B., and Petrella, E.: The use of oleandomycin-tetracycline in buccal surgery, paper read at Sixth Annual Symposium on Antibiotics, Washington, D. C., Oct. 1958, to be published. 23. English, A. R.; McBride, T. J.; Van Halsema, G., and Carlozzi, M.: Biologic studies on PA-775, a combination of tetracycline and oleandomycin with synergistic activity, Antib. & Chemo. *6*:511-522 (Aug.) 1956. 24. Farah, L.: Some therapeutic indications of Signemycin, Medicina, Mex. *783*:519 (Nov.) 1957. 25. Faz Tabio, H.: Severe enterosepsis treated with Signemycin, Rev. cubana pediat. *29*:3 (May) 1957. 26. Faz Tabio, H.: Signemycin in the treatment of certain diseases of the respiratory tract, Rev. cubana pediat., *30*:219 (Apr.) 1958. 27. Febles, D., and Biderman, I.: Antibiotic management of acute infections in the obstetric patient, paper read at Sixth Annual Symposium on Antibiotics, Washington, D. C., Oct. 1958, to be published. 28. Felder, J.: Signemycin in der padiatrie, Schweiz. med. Wschr. *88*:953 (Sept. 27) 1958. 29. Fiora, F., and Compa, F.: The combination antibiotic oleandomycin-tetracycline (Signemycin) in acute biennorrhagia, Dia med. B. Air. *30*:570 (Apr. 3) 1958. 30. Florio, I., and Scoppetta, F. P.: Sigmamicina ed occlusione intestinale sperimentale, Bulletin med. & surg. soc., Pavia, *71*:1, 1957. 31. Foradori, M.: A case of meningitis due to *Staphylococcus aureus* complicating tubercular meningitis, treated successfully with Signemycin, Minerva med. *48*:2707 (Aug. 25) 1957. 32. Frank, L., and Stritzler, C.: Newer antibiotics in the treatment of acne. Antibiotic M. *4*:419 (July) 1957. 33. Friedrich, K., and Hammerl, H.: A new treatment for bacterial infection with an antibiotic comoination, to be published. 34. Gemma, G. B.; Mel, C., and Bachi, V.: First experiences with Signemycin in surgical infections, Minerva med. *48*:2643 (Aug. 25) 1957. 35. Gilley, E. W.: Clinical appraisal of tetracycline and oleandomycin used in combination, to be published. 36. Hagan, H., and Scheffler, H.: Preliminary clinical experience with oleandomycin and the double-spectrum antibiotic, Signemycin, Medizinische, *14*:477 (Apr. 6) 1957. 37. Harris, H. J.: Tetracycline and oleandomycin (Signemycin) in chronic brucellosis, to be published. 38. Hasenclever, H. F.: Comparative *in vitro* studies of hospital strains of *Staphylococcus aureus* with oleandomycin, tetracycline and an oleandomycin-tetracycline mixture, Antibiotic M. *5*:14-25 (Jan.) 1958. 39. Hegglin, R.: Ornithosis, Schweiz. med. Wchnschr. *3*:64, 1958. 40. Henne, H. F.: Clinical experiences with the double-spectrum antibiotic Signemycin, Med. Klin., Berl., *29*:1267-1270 (July 18) 1958. 41. Heredia Diaz, J.; Saavedra Zavaleta, G.; Robles, M. A., and Aguilar, D. L.: Tetracycline-oleandomycin (Signemycin) in the treatment of puerperal infections, Medicina, Mex. *38*:308, 1958. 42. Hoffmann, H.: Clinical experiences with the broad-spectrum antibiotic, Signemycin, Medizinische, *45*:1850 (Nov. 8) 1958. 43. Hoz Fabra, J.: Preliminary results of a clinical trial with Signemycin, Rev. clin. espan. *67*:101 (Oct. 31) 1957. 44. Kaiser, J. A.; Mazzarino, C.; Bajek, E. M., and P'an, S. Y.: Oleandomycin-tetracycline: Toxicity in experimental animals. Antibiotics & Chemother. *7*:255-259 (May) 1957. 45. Kanee, B., and Cockcroft, W. H.: Clinical and bacteriological studies on Signemycin (oleandomycin-tetracycline) ointment, Canad. M. Assoc. J. *78*:614 (Apr. 15) 1958. 46. Keil, P. G.; Tieszen, R. L., and Solomon, R. J.: An evaluation of Signemycin in the treatment of pneumonia, to be published. 47. Klovstad, O.: Signemycin "Pfizer" a combination of oleandomycin and tetracycline, Tidsskr. norske laegefor *15*:681 (Aug.) 1957. 48. Kohler, H. F.: Case report of the month: chronic osteomyelitis, Clinical Review & Research Notes, *1*:16 (Apr.) 1958. 49. Kraljevic, R., et al.: Investigation of the therapeutic value of the combination of tetracycline and oleandomycin, Antibiotic M. *5*:364-371 (June) 1958. 50. Kraljevic, R.: Discussion of the paper by Florentin and Sison (The role of antibiotics in Asian Influenza). Antibiotics Annual 1957-1958, New York, Medical Encyclopedia, Inc., 1958, p. 948. 51. Kraljevic, R.; Pearson, E., and Borgano, J. M.: Combined oleandomycin-tetracycline therapy in respiratory tract and other infections, to be published. 52. LaCaille, R. A., and Prigot, A.: Combinations of oleandomycin with oxytetracycline and tetracycline in soft-tissue infections, Antibiotics Annual 1956-1957, New York, Medical Encyclopedia, Inc., 1957, p. 67. 53. Levi, W. M., and Kredel, F. E.: A clinical trial of Signemycin, South Carolina M. J. *53*:178 (May) 1957. 54. Lewis, H. M.; Frumess, G. M., and Henschel, E. J.: Treatment of skin infections with tetracycline and oleandomycin, Rocky Mountain M. J. *54*:806 (Aug.) 1957. 55. Lopez, A. V., and Cohen, H. J.: The clinical trial of a combination of tetracycline hydrochioride and oleandomycin (oral suspension) in the treatment of severe pulmonary infections in children, to be published. 56. Loughlin, E. H., and Mullin, W. G.: Combined antibiotic therapy of tropical infections with Matroterra and Signemycin, Antibiotics Annual 1957-58, New York, Medical Encyclopedia, Inc., 1958, p. 698. 57. Loughlin, E. H., and Mullin, W. G.: Combined antibiotic therapy of tropical infections with PA-765 and PA-775, Antibiotics Annual

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1956-57, New York, Medical Encyclopedia, Inc., 1957, p. 63. 58. McCloud, L. C.; Shidal, W., and Mulligan, J. L.: Clinical observations on infections treated with a combination of tetracycline and oleandomycin, to be published. 59. McFadden, H. W., and Schelhart, D.: Comparison of the *in vivo* sensitivity of micrococci to oleandomycin, tetracycline and a combination of oleandomycin and tetracycline. Antibiotics Annual 1957-1958, New York, Medical Encyclopedia, Inc., 1958, pp. 514-519. 60. Manara, G., and Gasparetto, A.: The first clinical experience with water-soluble Signemycin, University of Padua, Minerva chirurgica *13*:535 (May 15) 1958. 61. Medina Morales, F.: The combination of tetracycline-oleandomycin (Signemycin) in the postoperative treatment of three cases of pulmonary resection, Medicina, Mex. *800*:347, 1958. 62. Mehra, B. K.: Combating the resistant staphylococci, Current Med. Pract. *1*:326-328 (May) 1957. 63. Mendiola, R.; Naranjo, R., and Briseno, F.: New contributions to the treatment of tuberculosis, Medicina, Mex. *37*:269 (June 25) 1957. 64. Mendoza Diez, J.: Treatment of osteomyelitis with Signemycin, Thesis, Universidad Nacional Mayor de San Marcos, Facultad de Medicina, Lima, Peru, 1957. 65. Moggian, G.: Preliminary results of a new antibiotic association in obstetrics and gynecology, Minerva med. *48*:2648 (Aug. 25) 1958. 66. Molinelli, E. A.; Vera Barros, E., and Ithurralde, D.: Tetracycline-oleandomycin in human brucellosis therapy, Antibiotics Annual 1957-58, New York, Medical Encyclopedia, Inc., 1958, pp. 692-697. 67. Montilli, G., and Avellino, M.: Experienze con una nuova associazione di antibiotici (tetraciclina ed oleandomicina) in terapia dermatologica, Dermatologia *9*:3, 1958. 68. Morador, J. L., and Morador, S.: Cause, prevention and treatment of staphylococcal infection in hospitals, paper read at Sixth Annual Symposium on Antibiotics, Washington, D. C., Oct. 1958, to be published. 69. Morador, J. L., and Tate, L. S.: Treatment of 52 cases of infections caused by coagulase-positive staphylococci with a combination of oleandomycin and tetracycline, Antibiotics Annual 1957-58, New York, Medical Encyclopedia, Inc., 1958, pp. 702-707. 70. Morador, J. L., and Tate, L. S.: The treatment of anorectal infections with Signemycin, An. Ateneo Clin. Quirur. *1*:52 (Jan.) 1958. 71. Morel, A. S.: Surgical infections: a guide to therapy, Clinical Review & Research Notes *1*:18-21 (July) 1958. 72. Morey, G. S.: Infections in nursing babies due to *Pseudomonas aeruginosa (B. pyocyaneus)* alone or associated with other organisms, Rev. Hosp. nino, *72*:3, 1958. 73. Oates, J. K.: Trial of Signemycin in non-specific urethritis, Brit. J. Vener. Dis. *34*:38, 1958. 74. O'Herlihy, F. C.: A clinical trial with Signemycin, Medical Press (London), p. 897 (Sept. 17) 1958. 75. Olmer, J., and Casanova, P.: Therapeutic notes: Clinical trials of Signemycin in the treatment of 59 patients, Semaine hop. Paris, Vol. 34, no. 2 (Feb.) 1958. 76. Ottolenghi, C. E.; Frigerio, E. R., and Soto Jimenez, D.: Combined antibiotic therapy in 35 cases of osteomyelitis, Bol. y trab., Soc. cir. Buenos Aires, *41*:739, 1957. 77. Pagola, J. G.; Benavides, L., and Heredia, A.: An evaluation of tetracycline-oleandomycin in the treatment of epidemic typhus, paper read at Sixth Annual Symposium on Antibiotics, Washington, D. C., Oct. 1958, to be published. 78. Pavone, M.; Anello, A., and Macaluso, M. P.: Signemycin in the therapy of infections of urinary passages, to be published. 79. Perez Villasante, G.: Postoperative treatment of the ear cavity, An. Soc. Mexico de Otorinolaringologia, No. *34-35*:175 (May-Aug.) 1957. 80. Prokop, O.: On the question of staphylococcus infections resistant to therapy, Der Praktische Arzt, *12*:145 (Feb. 15) 1958. 81. Quarti, M.: Efficacy of the association of oleandomycin and tetracycline in staphylococcal infections, Aggiornamento Pediatrico, *8*:11, 1957. 82. Quirno, N.; Fukelman, R., and Achaval, M.: Treatment with oleandomycin-tetracycline of infections observed in clinical practice, Dia med. *30*:2938 (Nov. 17) 1958. 83. Ragazzini, F.; Moggi, P., and Acocella, M.: First clinical applications of Signemycin in pediatrics, Minerva med. *48*:2667 (Aug. 25) 1957. 84. Randig, K.: Some experiences with Signemycin, Deutsches med. J. *8*:447 (Aug. 15) 1957. 85. Rebelledo, L. M., and Heredia, D. J.: Further clinical studies of an association of tetracycline and oleandomycin in the treatment of various infections, paper read at Sixth Annual Symposium on Antibiotics, Washington, D. C., Oct. 1958, to be published. 86. Rentchnick, P.: A combination of broad-spectrum antibiotics, Medecine et Hygiene, *379*:562 (Nov. 30) 1957. 87. Revelli, E., and Durando, C.: Treatment of the nonspecific inflammatory component of tuberculosis of the female genital organs, Minerva med. *48*:2658 (Aug. 25) 1957. 88. Rivera, J. A.; Brame, R. E., and Osborne, D.: Sensitivity of *Micrococcus pyogenes* from burned patients to the action of oleandomycin. The emergence of resistance to this antibiotic, paper read at Sixth Annual Symposium on Antibiotics, Washington, D. C., Oct. 1958, to be published. 89. Rondanelli, E. G.: The therapeutic problem of orchitis by parotitic virus, Institute of General Clinical Medicine and Medical Therapy of the University of Pavia, Bulletin med. & surg. soc., Pavia, *71*:1, 1957. 90. Saavedra Amaro, S., and Lopez Zepeda, L.: Comprobacion clinica de la Signemycin en el tratamiento de infecciones diversas, to be published in Medicina, Mex. 91. Sanchez Creus, P.: Los antibioticos de indicaciones limitadas, Rev. clin. espan. *69*:378 (June 30) 1958. 92. Sangiuolo, F.: Therapeutic action of the tetracycline-oleandomycin (Signemycin) association, Minerva med. *48*:2679 (Aug. 25) 1957. 93. Santas, A. A.; Ganora, H. M., and Brea, C. M.: Antibiotic prophylaxis in thoracic surgery, paper read at Sixth Annual Symposium on Antibiotics, Washington, D. C., Oct. 1958, to be published. 94. Schenone, H.: Genitourinary infections treated with the antibiotic combination tetracycline and oleandomycin, paper read at Sixth Annual Symposium on Antibiotics, Washington, D. C., Oct. 1958, to be published. 95. Shubin, H.: Clinical evaluation of combined chemotherapy, oleandomycin and tetracycline, Antibiotic M. *4*:174 (March) 1957. 96. Signer, A., and Vinci, G. G.: Signemycin in the healing of wounds, Arch. Societa Med-Chirurg. Messina, Vol. II, 1957. 97. Smazal, S. F., and Crowley, P. J.: Routine use of the antibiotics tetracycline and oleandomycin in combination for the treatment of infections represented in an unselected series of general office patients, to be published. 98. Steinman, E.: Trial of an antibiotic combination as a routine agent for treatment of infections in office practice, to be published. 99. Stritzler, C., and Frank, L.: Significance of the response of acne vulgaris to antibiotics, Antibiotic M. *5*:109 (Feb.) 1958. 100. Talbot, J. R.: Experience with an antibiotic combination (tetracycline-oleandomycin) used routinely for anti-infective therapy in an office practice, Wisconsin M. J. *57*:237-238 (June) 1958. 101. Tato, J. M.; Galli, L. A.; Rechniewski, C.; Arauz, S.; Games, J.; Bello, J.; de Sebastian, G., and Bergaglio, O.: Treatment of chronic sinusitis with a combination of oleandomycin and tetracycline, Antibiotics Annual 1957-1958, New York, Medical Encyclopedia, Inc., 1958, p. 675. 102. Willcox, R. R.: Tetracycline and oleandomycin in combination in nongonococcal urethritis, Antibiotics Annual 1957-58, New York, Medical Encyclopedia, Inc., 1958, p. 672. 103. Willcox, R. R.: The treatment of nongonococcal urethritis with tetracycline and oleandomycin in combination (Signemycin), Medical Press (London) (Dec. 11) 1957. 104. Willemot, J. P., et al.: Signemycin in the treatment of pulmonary infections, Bruxelles med. *38*:1026 (June 22) 1958. 105. Winton, S. S., and Chesrow, E. J.: A clinical study of combined chemotherapy, Antibiotics Annual 1956-57, New York, Medical Encyclopedia, Inc., 1957, p. 55. 106. Wittmoser, R.: Hospitalismus, Chirurgische Praxis, *3*:281 (Sept.) 1957. 107. Zaldivar, C. G., and Falcone, F.: Preliminary results in osteomyelitis with tetracycline and the phosphate of oleandomycin (Signemycin), Rev. Hosp. nino *18*:151 (June) 1957. 108. Zaldivar, C. G.: Complicated forms of chronic osteomyelitis, Rev. Hosp. nino *72*:315 (Dec.) 1957.

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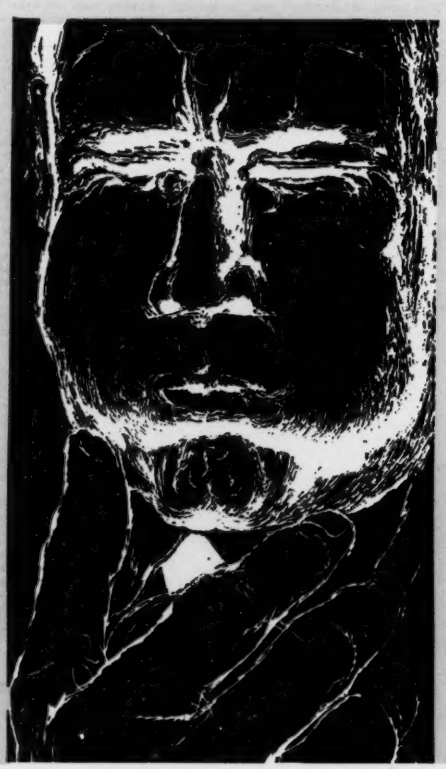

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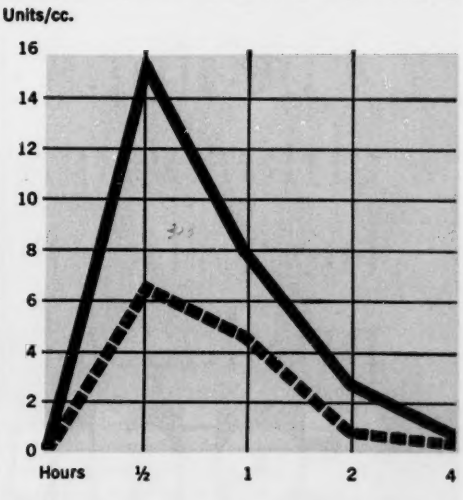

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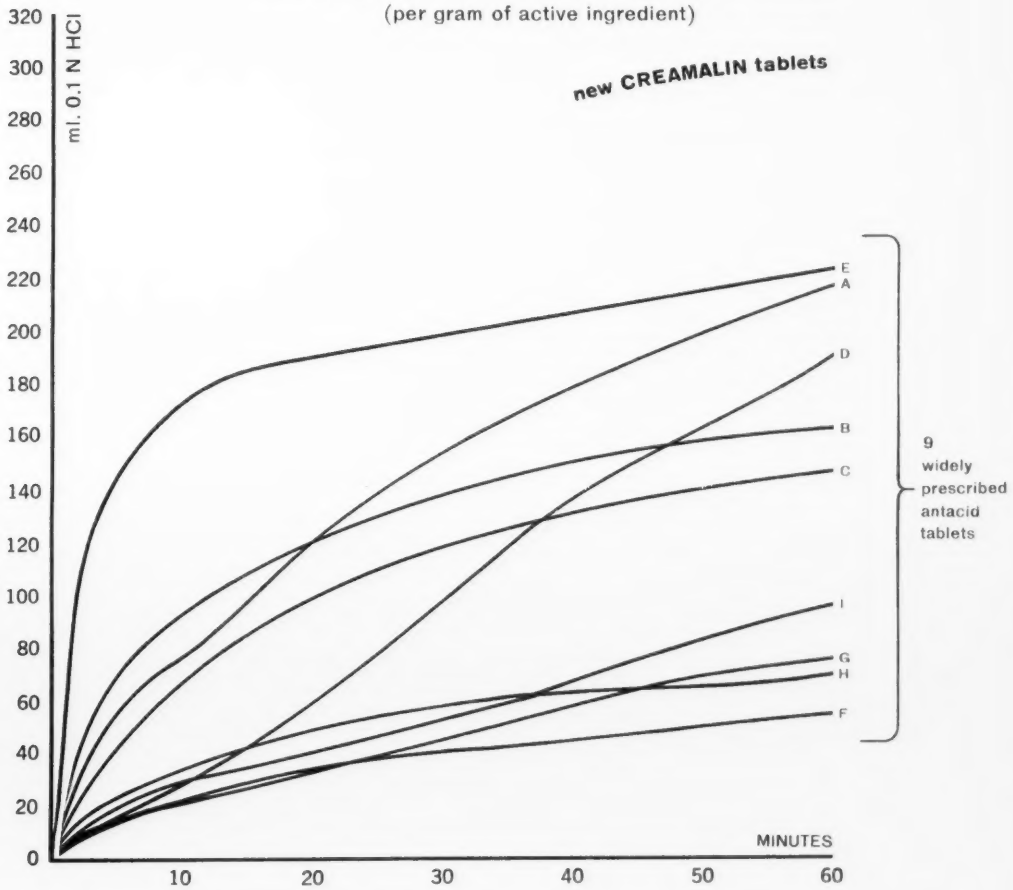

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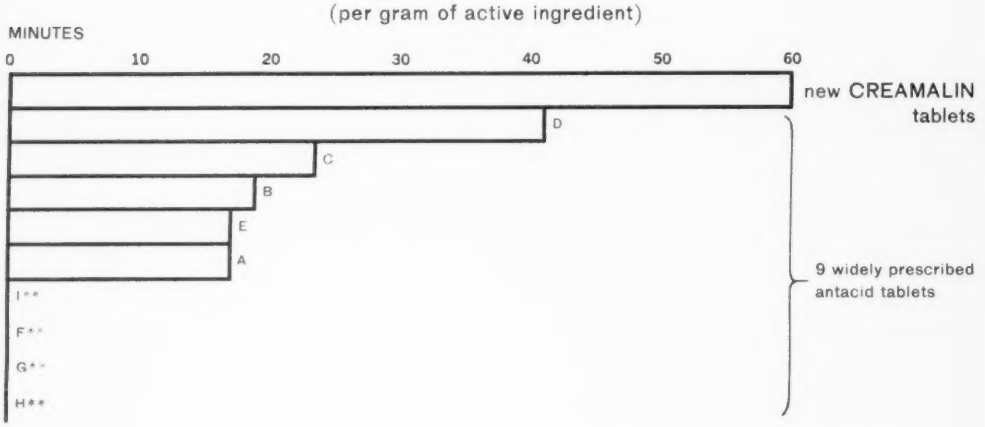

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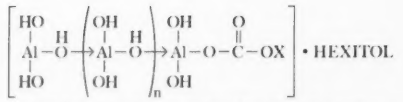

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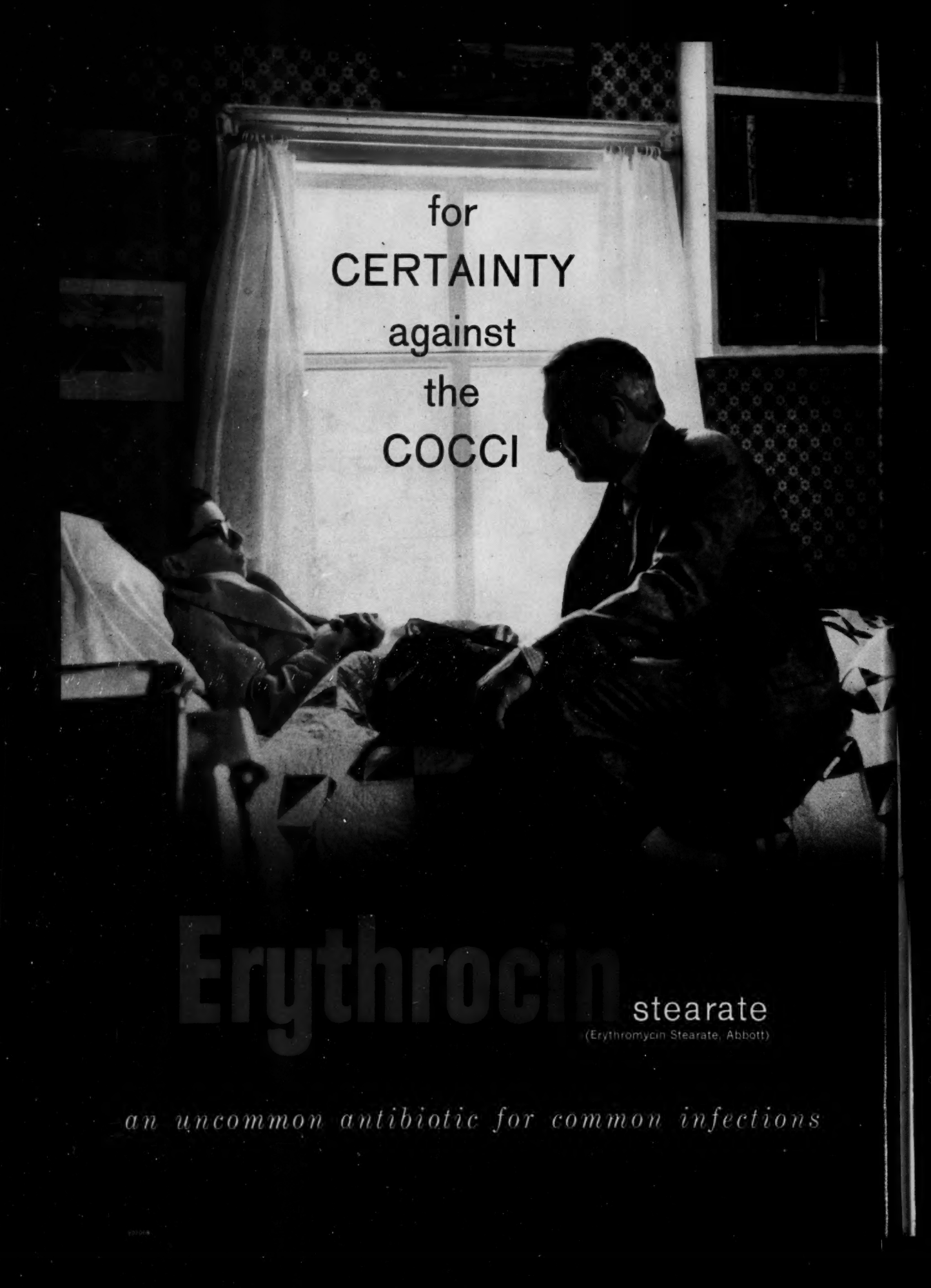
for
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the
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Erythrocin
stearate
(Erythromycin Stearate, Abbott)
an uncommon antibiotic for common infections

after millions of prescriptions ...an unparalleled safety record

provides fast, high blood and tissue concentrations

Because ERYTHROCIN Stearate is rapidly absorbed, patients get therapeutic blood and tissue levels within 30 minutes. High, peak levels occur between one and two hours—and effective concentrations are maintained for at least six hours. Always at hand, then, against more critical infections is ERYTHROCIN-I.M.—the only intramuscular form of erythromycin available.

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Actually, every prescription you write for ERYTHROCIN is backed by more than six years of clinical effectiveness against coccal infections. And, with the problem of antibiotic resistance becoming more important daily, the value of ERYTHROCIN as a day-to-day anticoccal agent is dramatically underlined.

supported by an unparalleled safety record

During all the years ERYTHROCIN has been prescribed, serious reactions have been practically nonexistent. Unlike penicillin, allergy is no problem. And, in contrast to "broad-spectrum" action, the normal flora of the intestinal tract is virtually unaltered with ERYTHROCIN therapy.

offers bactericidal activity

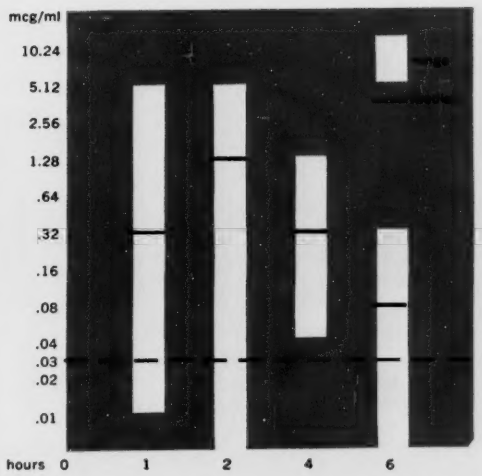
Unlike broad-spectrum antibiotics, ERYTHROCIN is classed as a bactericidal antibiotic. It offers lethal action against common coccic invaders—resulting in prompt clinical response.

provides convenient dosage forms

Usual adult dose is 250 mg. four times daily. Children's dosage is reduced in proportion to body weight. ERYTHROCIN comes in Filmtabs® (100 and 250 mg.), bottles of 25 and 100. Also in oral suspension and for intramuscular use. Won't you prescribe ERYTHROCIN doctor? Abbott

if you're concerned with blood levels...

Dotted line shows actual inhibitory concentrations against most organisms. Note the high ranges and medians of ERYTHROCIN Stearate at one, two, four and six hours. Data represents three studies with adults. Each was given one 250-mg. Filmtab.



And where you need a consistent uniform response that only an injectable form can provide, remember—**ERYTHROCIN-I.M.**(Erythromycin Ethyl Succinate, Abbott) and **ERYTHROCIN LACTOBIONATE.**

®Filmtab—Film-sealed tablets, Abbott; pat. applied for.

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with low incidence of sensitivity reactions . . .
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Esidrix® (hydrochlorothiazide CIBA)

for edema and hypertension

To the relief of musculoskeletal pain, new MEDAPRIN* adds restoration of function

Analgesics offer temporary relief of musculoskeletal pain, but they merely *mask* pain rather than getting at its *cause*. New Medaprin, in addition to bringing about prompt subjective improvement, promotes the *restoration of normal function* by suppressing the inflammation that *causes* the pain.

Medaprin, Upjohn's new analgesic-steroid combination, contains aspirin plus Medrol,** the corticosteroid with *the best therapeutic ratio in the steroid field.*† Instead of suffering recurrent discomfort because of the "wearing off" of analgesics, the patient on Medaprin experiences a smooth, *extended* relief and more normal mobility.

Indications: Medaprin is indicated in mild-to-moderate rheumatic and musculoskeletal conditions, including rheumatoid arthritis, deltoid bursitis, low back pain, neuralgia, synovitis, fibromyositis, osteoarthritis, low back sprain, traumatic wrist, sciatica, and "tennis elbow."

Dosage: The recommended dosage is 1 tablet q.i.d. The usual cautions and contraindications of corticotherapy should be observed.

Supplied: In bottles of 100 and 500.

Formula: Each Medaprin tablet contains

- 300 mg. acetylsalicylic acid, for prompt relief of pain
- 1 mg. Medrol, to suppress the causative inflammation
- 200 mg. calcium carbonate, as buffer

*TRADEMARK **TRADEMARK, REG. U. S. PAT. OFF. — METHYLPREDNISOLONE, UPJOHN
†RATIO OF DESIRED EFFECTS TO UNDESIRED EFFECTS

The Upjohn Company, Kalamazoo, Michigan

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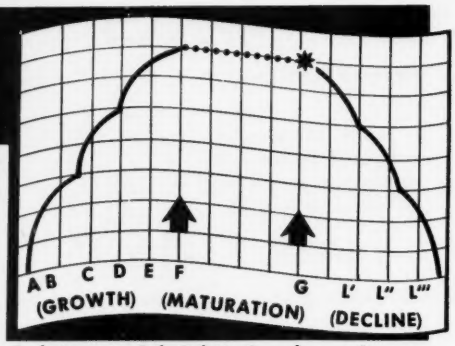
...to postpone the "G" point*...

Rx.....Geritag



For patients over 40, The G POINT (point of declination in life) can be postponed!

Properly balanced Androgen — Estrogen — nutritional therapy may prevent premature aging and damage of gonadal decline and nutritional inadequacy.

Complaints of symptoms such as muscular pain, fatigue, irritability, and poor appetite in the patient over 40 may be the first indications of three major stress factors in the aging process: (1) Gonadal Hormonal Imbalance, (2) Nutritional Inadequacy and (3) Emotional Instability. GERITAG is especially formulated to guard against premature damage and to delay the degenerative process.

Rx GERITAG in preventive geriatrics.

*Chappel, C.C., J.A.M.A., 162: 1414, (Dec. 8) 1956

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Methyltestosterone	2 mg.	Thiamine Hcl.	2 mg.
Ethinyl Estradiol	0.01 mg.	Riboflavin	2 mg.
Ferrous Sulfate	50 mg.	Pyridoxine Hcl.	0.3 mg.
Rutin	10 mg.	Niacinamide	20 mg.
Ascorbic Acid	30 mg.	Manganese	1 mg.
B-12	1 mcg.	Magnesium	5 mg.
Molybdenum	0.5 mg.	Iodine	0.15 mg.
Cobalt	0.1 mg.	Potassium	2 mg.
Copper	0.2 mg.	Zinc	1 mg.
Vitamin A	5,000 I.U.	Choline Bitartrate	40 mg.
Vitamin D	400 I.U.	Methionine	20 mg.
Vitamin E	1 I.U.	Inositol	20 mg.
Cal. Pantothenate	3 mg.		

Also available as injectable.

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Lederle

Clinical findings in 900 patients show the selective antihypertensive action of Singoserp

IN 735 PATIENTS, BLOOD PRESSURE FELL AN AVERAGE OF 30.7 mm. Hg:

- more than half of these patients suffered from **moderate to severe hypertension**
- more than half of the cases involved hypertension of at least 6 years' standing, with **many histories of up to 20 years' duration**

THE SIDE-EFFECTS PROBLEM WAS MINIMIZED IN MOST PATIENTS:

Chart shows gratifyingly low incidence of side effects in 233 patients given Singoserp with no other antihypertensive medication

Side Effect	Number	Per Cent
Lethargy	7	2.9
Headache	6	2.5
Gastrointestinal upset	3	1.2
Vertigo	2	0.8
Nasal congestion	1	0.4

DOSAGE: Initially, 1 to 2 tablets (1 to 2 mg.) daily.
SUPPLIED: Singoserp *Tablets,* 1 mg. (white, scored); bottles of 100.
Samples available on request. Write to CIBA, Box 277, Summit, N.J.

a major improvement in rauwolfia

a major advance in antihypertensive therapy

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(syrosingopine CIBA)

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Pentaerythritol Tetranitrate .... 15 mg.
Thiamin Nicotinate ..... 5 mg.

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Pearl River, New York

Convenient information for physicians starting diabetic patients on

DIABINESE

simple once-a-day dosage in practice

During the initial control period, the patient should check his urine at frequent intervals, and report at least once weekly for review of symptoms, physical examination, urine and/or blood examination for glucose.

The New Patient *(no previous antidiabetic therapy)*

1. Initial daily dose 500 mg. (2 tablets of 250 mg. each) with breakfast.

2. In elderly patients, initial dose 250 mg. (1 tablet) daily.

3. CONTROL PERIOD

(a) If blood sugar reaches normal levels after three to seven days, or if glycosuria disappears, lower daily dose of 500 mg. to a level between 250 mg. (1 tablet) and 375 mg. (1½ tablets of 250 mg.) with breakfast daily. In elderly patients, dosage may be reduced to as low as 100 mg.

(b) If hyperglycemia or glycosuria persists or develops, increase the daily dose from 500 mg. to 625 mg. (2½ tablets of 250 mg.) with breakfast daily. In elderly patients, dosage should be increased from 250 mg. according to patient response.

(c) Continue weekly adjustments during first month of therapy until maintenance dose has been established. Adjustments below 250 mg. daily are best made in steps of 100 mg. (one 100 mg. tablet). The maintenance dose may occasionally be as low as 100 mg. (one 100 mg. tablet daily) or, rarely, as high as 1.0 Gm. (four 250 mg. tablets) daily. Do not exceed daily dose of 1.0 Gm.

Transfer of Patient from Insulin

1. If patient is taking 40 or less units of insulin daily and gives no history of severe or "brittle" diabetic response, discontinue insulin and replace with DIABINESE as in The New Patient.

2. Complete control period as for The New Patient. Priming ("loading") doses should not be used.

3. If patient is taking more than 40 units of insulin daily, or shows evidence of severe or brittle diabetes, reduce insulin dose by 50 per cent and initiate DIABINESE therapy as for The New Patient. Further reduction of insulin dosage depends on patient response.

Transfer of Patient from Other Oral Medication

Where less than satisfactory control has been achieved with other oral medication, or where a change to once-a-day dosage is desired, DIABINESE may be successfully substituted. Such a transfer may be made by discontinuing previous oral medication, substituting DIABINESE, and continuing control period as for The New Patient. Avoid priming doses.

The clinical safety of DIABINESE has been established by more than two years' trial. By adherence to the above dosage schedule, side effects of DIABINESE will generally be infrequent, mild, and transient.

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brand of chlorpropamide

once-a-day dosage

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SUPPLIED: *Tablets*, 250 mg., bottles of 60 and 250, white, scored. 100 mg., bottles of 100, white, scored.

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respiratory infections

prompt, high blood levels

consistently reliable and reproducible blood levels

minimal adverse reactions

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Allergy-free...all day... with this much medication

Typically, the allergic patient can enjoy a whole day's freedom from symptoms with just one Pyribenzamine Lontab in the morning—a whole night of restful sleep with just one Lontab in the evening.

The outer shell of the unique Lontab actually contains an effective dose of Pyribenzamine which is released minutes after the Lontab enters the stomach. Thereafter, medication is released uniformly and continuously from the specially formulated inner core of the Lontab—sustaining antiallergic effect as long as 12 hours.

For patients who need only periodic medication, regular Pyribenzamine tablets provide fast, dependable action, with a minimum of undesirable side effects.

SUPPLIED: Pyribenzamine Lontabs—full-strength—100 mg. (light blue). **Pyribenzamine Lontabs**—half-strength—50 mg. (light green); for children over 5 and adults who require less antiallergic medication. **Pyribenzamine** Regular Tablets, 50 mg. (green, scored) and 25 mg. (green, sugar-coated).

Pyribenzamine® hydrochloride *(tripelennamine hydrochloride* CIBA) **Lontabs®** *(long-acting tablets* CIBA)

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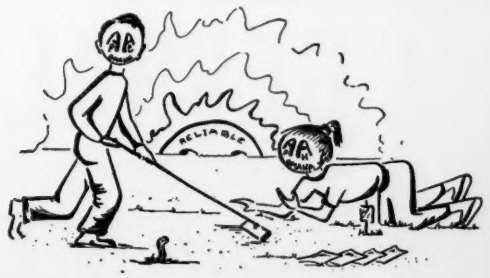
JUST ONE KEEPS YOUR ALLERGIC PATIENT ON A 12-HOUR THERAPEUTIC PLATEAU



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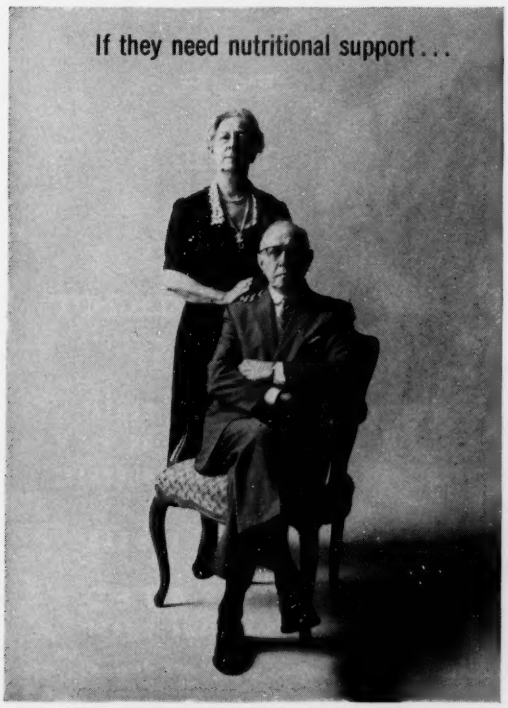
If they need nutritional support . . .



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Vitamin D	500 U.S.P. Units
Vitamin B_{12} with AUTRINIC® Intrinsic Factor Concentrate	1/15 U.S.P. Oral Unit
Thiamine Mononitrate (B_1)	5 mg.
Riboflavin (B_2)	5 mg.
Niacinamide	15 mg.
Folic Acid	1 mg.
Pyridoxine HCl (B_6)	0.5 mg.
Ca Pantothenate	5 mg.
Choline Bitartrate	50 mg.
Inositol	50 mg.
Ascorbic Acid (C)	50 mg.
Vitamin E (as tocopheryl acetates)	10 I.U.
l-Lysine Monohydrochloride	25 mg.
Rutin	25 mg.
Ferrous Fumarate	30 mg.
Iron (as Fumarate)	10 mg.
Iodine (as KI)	0.1 mg.
Calcium (as $CaHPO_4$)	157 mg.
Phosphorus (as $CaHPO_4$)	122 mg.
Boron (as $Na_2B_4O_7.10H_2O$)	0.1 mg.
Copper (as CuO)	1 mg.
Fluorine (as CaF_2)	0.1 mg.
Manganese (as MnO_2)	1 mg.
Magnesium (as MgO)	1 mg.
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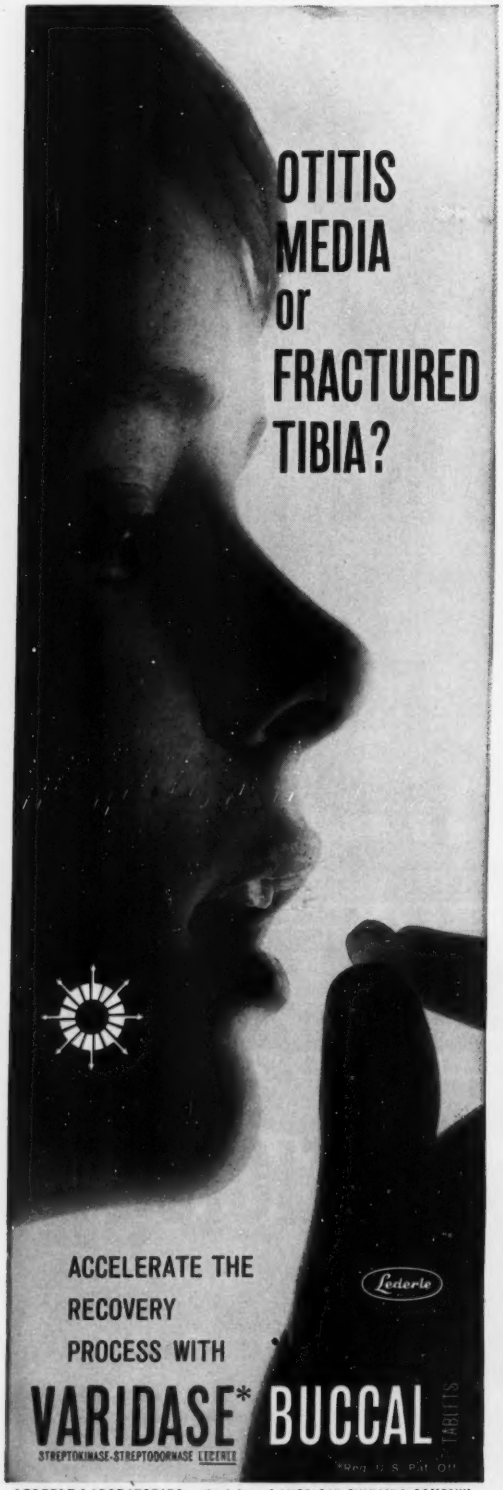

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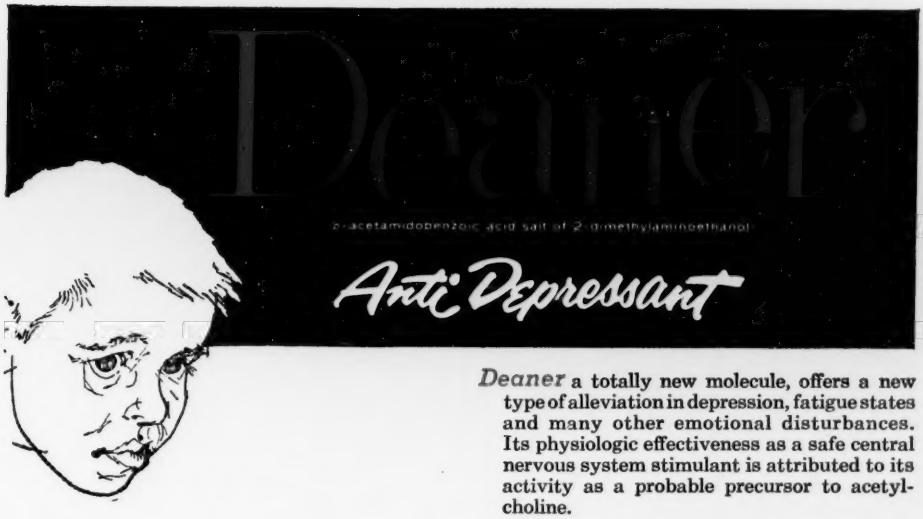

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'Deaner' must not be confused with tranquilizing or sedative drugs which may aggravate depression. On the contrary, 'Deaner' is often used to counteract drug-induced depression.

'Deaner' is valuable as an emotional normalizer in many situations other than depression, such as behavior problems with agitation. Nor should 'Deaner' be considered an ordinary stimulant. Its gentle action differs from that of other stimulants in that it leads to increased useful energy and alertness without the undesirable side effects of the amphetamine-like drugs.

Deaner a totally new molecule, offers a new type of alleviation in depression, fatigue states and many other emotional disturbances. Its physiologic effectiveness as a safe central nervous system stimulant is attributed to its activity as a probable precursor to acetylcholine.

Deaner leads to better ability to concentrate, increased daytime energy, sounder sleep (with less sleep needed), and a more affable mood.

Deaner acts gently, gradually, and its effects are prolonged... without causing hyperirritability... without loss of appetite... without elevating blood pressure or heart rate... without sudden letdown on discontinuance.

Deaner is valuable in the treatment of children, especially those whose performance is impaired by behavior problems, whose attention span is too short, and who are emotionally unstable, unpredictable, and unadaptable.

Dosage ***for children:*** Initially ½ to 1 tablet in the morning. Maintenance dose ½ to 3 tablets. Full benefits may require two weeks or more of therapy. Supplied in scored tablets containing 25 mg. of 2-dimethylaminoethanol as the p-acetamidobenzoic acid salt. Available in bottles of 100.

Literature and bibliography available upon request.

Riker Northridge, California

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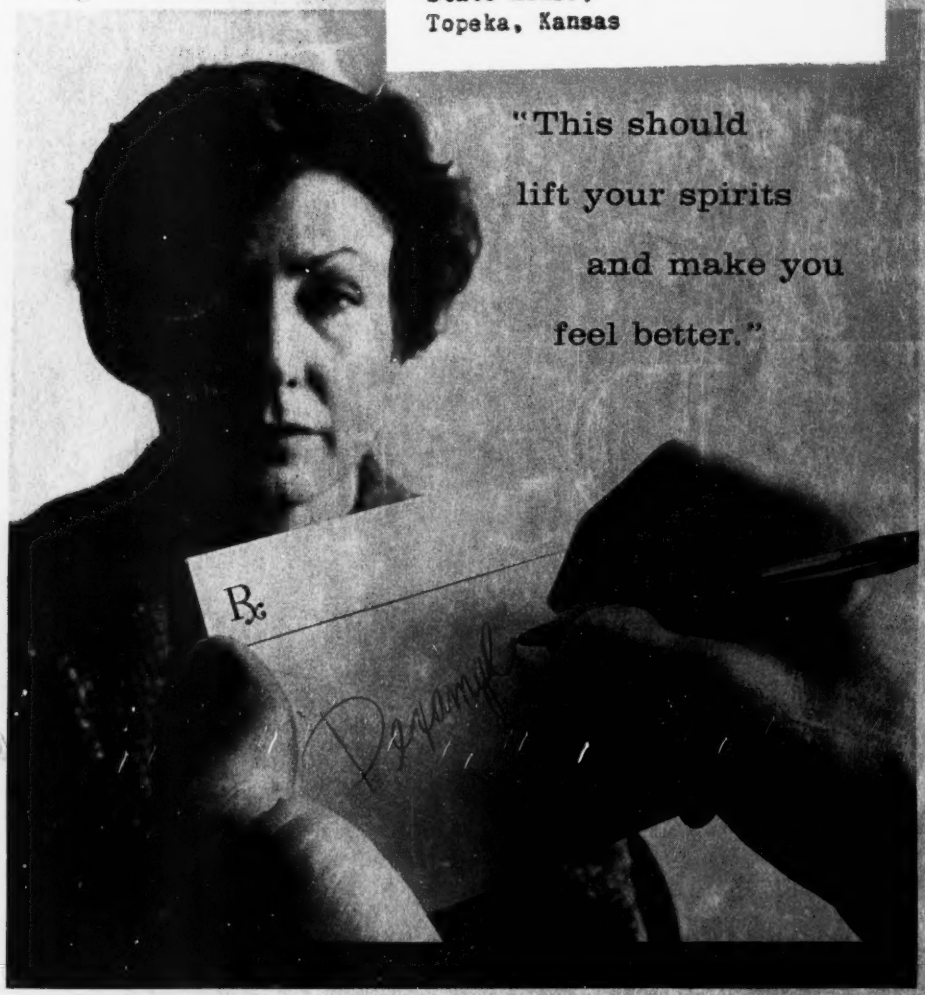

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brand of dextro amphetamine plus amobarbital

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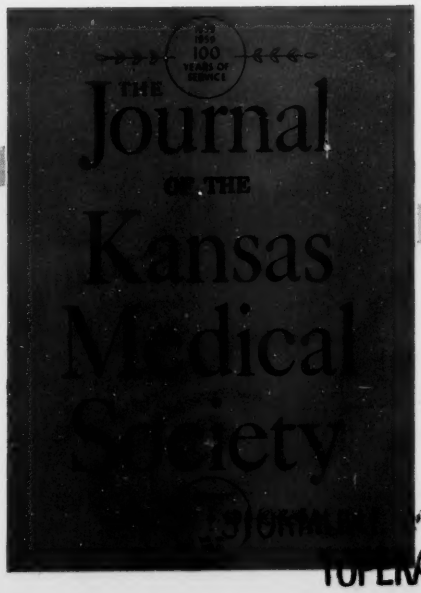
OF

The Kansas Medical Society



Volume LX · Number V

CENTENNIAL ISSUE

May 1959

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THE FIRST CENTURY
of the
KANSAS MEDICAL SOCIETY

This volume has been prepared and is presented by the members of the Editorial Board and the Staff of the Journal as their contribution to the Centennial Celebration of the Society.

THE JOURNAL
of the
KANSAS MEDICAL SOCIETY

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Centennial Issue

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Preface

All articles which are reproduced, either in full or in part, were first published in the TRANSACTIONS OF THE KANSAS MEDICAL SOCIETY (1859-1900), or the JOURNAL OF THE KANSAS MEDICAL SOCIETY (1901-1959). Notation of the year of original publication is placed at the end of each article. Bibliographies and references to medical literature have been intentionally omitted.

The work of reading these publications and the selection of the portions for reproduction here has been entirely that of the members of the Editorial Board—Drs. David E. Gray, Richard Greer, Dwight Lawson, and John A. Segerson. It would be difficult to estimate the number of hours which were required in this effort.

The preparation of the material for the printer, the work of assembling material, making arrangements for the numerous Board meetings, and many unrecognized but important and obliging duties were done by Miss Pauline Farrell, the Managing Editor, before she left the JOURNAL office.

Photographs are published through the courtesy of the Kansas State Historical Society, the Pennell Collection of the University of Kansas, the Kansas Industrial Development Commission, Kansas Blue Cross-Blue Shield, the Sisters of Charity at Xavier, Kansas, Kansas University School of Medicine, St. Margaret's Hospital at Kansas City, the Menninger Foundation, and the Harvey Advertising Agency.

Wilder's *Annals of Kansas, 1541-1885,* the *Annals of Kansas, 1886-1925,* (published by the Kansas State Historical Society), and Bright's *Kansas, the First Century,* were most helpful in collecting historical data for introductory remarks.

The art work was prepared under the direction of Mr. Perce Harvey, Jr., of the Harvey Advertising Agency. Mr. Ovid H. Bell, of The Ovid Bell Press, Inc., has been most helpful with suggestions and most cooperative in carrying out our wishes.

Many hours of work have gone into the preparation of this volume. It has been interesting, and the time was contributed ungrudgingly by all those concerned. It is our fond hope that it will prove to be interesting and enjoyable to the members of the Society and to other readers.

ORVILLE R. CLARK, *Editor*

PRIVATE LAWS

OF THE

TERRITORY OF KANSAS,

PASSED AT THE FIFTH SESSION

OF THE

LEGISLATIVE ASSEMBLY;

BEGUN AT THE

CITY OF LECOMPTON,

ON THE 1ST MONDAY OF JAN'Y, 1859, AND HELD AND CONCLUDED

AT THE

CITY OF LAWRENCE.

PUBLISHED BY AUTHORITY.

LAWRENCE, K. T.:
HERALD OF FREEDOM STEAM PRESS.
1859.

Approved February 11,
S. MEDARY,
Governor.

CHAPTER LIII.

AN ACT to Incorporate the Kansas Medical Society.

Be it enacted by the Governor and Legislative Assembly of the Territory of Kansas:

SECTION 1. That Amory Hunting, S. B. Prentiss, J. P. Root, A. Fuller, C. F. Kobb, J. W. Robinson, J. B. Wheeler, L. C. Tolles, S. C. Harrington, A. Danford, C. E. Miner, J. B. Woodward, W. Madison, J. H. Phelps, O. Brown, Charles Robinson, M. F. Holaday, H. J. Canniff, A. J. Richee, M. Baily, J. M. Pelot, H. H. Beals, J. G. Blunt, T. Linsey, G. W. Beaumont, I. Leigh, A. Newman, M. Harttmann, Wm. Graham, and their associates and successors who shall be elected to membership as hereinafter provided, are hereby constituted a body corporate and politic, by the name of the "Kansas Medical Society," and shall have perpetual succession forever. Said society may have a common seal and change or alter the same at pleasure.

SEC. 2. The members of said society, in their corporate ca-

May elect officers

pacity, may elect such officers as they shall judge necessary for its government and the management of its affairs; determine the name, power, duty and term of office of each; also, the time and manner of said elections.

Natural rights

SEC. 3. Said society, by and in their corporate name, may have all the rights, privileges and powers of a natural person in law and equity.

Power to elect, suspend members

SEC. 4. Said society may elect such persons to membership as they shall judge proper, and shall have power to expel, suspend or disfranchise the same, as members, from all the rights and privileges of the society; but such expulsion, suspension or disfranchisement shall be by a vote of two-thirds of all the members present, at a regular meeting of said society, of which due notice shall have been given.

Power to make by-laws, &c.

SEC. 5. Said society shall have full powers to make and enforce by-laws, and impose and collect at law any reasonable fines, not exceeding fifty dollars, as may be provided in said by-laws, for any and every violation or infraction thereof.

Certificates may be issued

SEC. 6. Said society shall issue certificates of membership to all its members, under such regulations as its by-laws may prescribe, and may, also, grant licenses to all respectable physicians, non-graduates, who shall, on examination, be found qualified for the practice of medicine and surgery, or either to practice those branches for which they are found qualified.

SEC. 7. Any three members of said society may organize a county or auxiliary societies in any county of this Territory, and said auxiliary societies, when so organized, shall have all the powers and privileges, in the corporate name which they may adopt, that are conferred by this act upon the Kansas Medical Society, and the officers of said auxiliary societies shall be hon-orary members of the Kansas Medical Society.

SEC. 8. A meeting of the corporators, or a part thereof, shall be held in Lawrence, on February the 10th, A. D. 1859, for the purpose of electing the first officers and completing the organization.

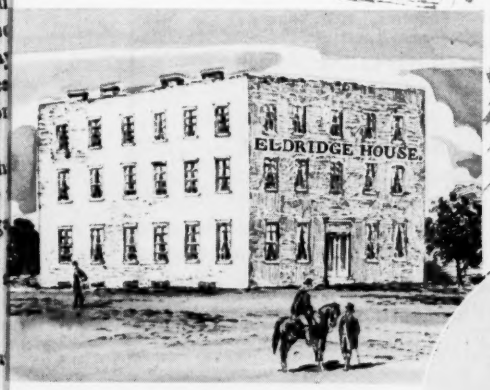
SEC. 9. This act to take effect and be in force from and after its passage.

A. LARZALERE,
Speaker of House of Representatives.
C. W. BABCOCK,
President of the Council.

Approved February 10, 1859.
S. MEDARY,
Governor.

A reproduction of the original publication of the charter of the Kansas Medical Society.

1859
"The Doctor Comes To Kansas!"
1879



2.

3.

1. Eldridge House, Lawrence, site of organizational meeting KMS.
2. Dr. S. B. Prentiss, First President of KMS.
3. St. John's Hospital, Leavenworth. Kansas' first civilian hospital. (1861)

Introduction

The Kansas Medical Society was conceived in a storm, near the end of the years of strife which were to determine whether Kansas was to be a free or a slave state. The Territory of Kansas had come into being in 1854, created by an Act which repudiated the compromise agreement of 1820 providing that no more slave territory was to be opened in that portion of the Louisiana Purchase which was west and north of Missouri. This repudiation paved the way for all the violence and tragedy of the next years, as the inhabitants of the new Territory struggled to determine their future. With the defeat of the Lecompton Constitution in August 1958, the success of the Free-State movement was assured, but the struggle had already won the appellation of "Bloody Kansas" for the Territory.

Carved from the land obtained in the Louisiana Purchase, with the addition of a small part of the former Spanish holdings, the Territory extended from Missouri to the "highest ridge of the Rocky Mountains," and its population consisted of only a few hundred persons. Just how many doctors were included in this group one can only guess, but certainly there were no more than a few. One must have respect, then, for the courage and foresight of the group of twenty-nine physicians who, in 1859, banded together, organized the Kansas Medical Society, and received a charter as such from the Legislative Assembly of the Territory, to ". . . have perpetual succession forever."

Leannec's stethoscope was forty-two years old; Parkinson, Bright, Addison, Hodgkin, and Bell had written even later the classical descriptions of the diseases to be known by their names; anesthesia was an infant of some thirteen years; and there was no concept of "germs" as associated with disease. Such was the medical background at the time of the organization of the Society.

These organizers were a hardy lot and they were not only physicians but active pioneer citizens. One of the names prominent in early Kansas is that of Charles Robinson, who had practiced medicine in Massachusetts, and later had gone to California as a widower in the '49 gold rush (when he first saw the Kaw Valley). He came to the Territory of Kansas in 1854 as the resident agent of the New England Emigrant Aid Company; was among the organizers of both Lawrence and Topeka; was Lawrence's first mayor; was "Territorial Governor" under the Topeka Constitution (which was never accepted); and was the first governor of the State of Kansas. He lived in Lawrence for forty years.

Joseph P. Root had been active in legislative affairs in his home in Connecticut before coming to Wyandotte in 1857. He became the second president of the Society, and was the first Lieutenant Governor of the state. John W. Robinson, of Maine, was the first Secretary of State.

This, then, is the background for the first years of the KMS. Some of the contributions of these years are reproduced, and though they contain an element of humor because of the great changes in medical practice during the ensuing century, we cannot help being impressed by their sincerity, their enthusiasm, and their foresight. (TRANSACTIONS prior to 1867 contained no addresses or papers presented at the meetings.)

Report of the Committee on Obstetrics

C. A. LOGAN, M.D., Leavenworth

Placenta Praevia

All physicians appreciate the depth of meaning attached to this term. Thanks, however, to the onward march of the art, it has been stripped of fully one-half its terrors; and the cases which now necessarily die from this accident are very few compared to the mortality from this cause fifty years, or even less, ago; the number probably being nearly represented by the sum of those who have unfortunately delayed procuring intelligent assistance until too late to save them.

The placenta, as is well known, in these unavoidable hemorrhages is implanted either centrically over the os uteri, or only covers a portion of the opening by a segment of its circle.

The first manifestations of trouble usually begin about the end of the eighth month. These manifestations explain themselves by gushes of blood, more or less profuse. It is at this time, when the physician has ascertained the exact nature of the difficulty, that a very grave question presents itself for solution, this being none other than the consideration of the propriety of terminating gestation by the induction of premature labor. There are many solid arguments in favor of such a course in cases of great seriousness. *Imprimis,* it is a strongly conservative measure, saving the woman, to say the least of it, from the severe drain of frequent and copious hemorrhages; and *secundo,* it can be accomplished with much better results to the mother, and quite as many assurances for the life of the child, as though the case were allowed to progress to the completion of the term.

The writer knows of no better way of determining this question than by a general consideration of all the circumstances in each case. Prominent among these, of course, will be the extent of the cervical implantation. Next to this in importance will be the ability of the woman to sustain a sanguineous loss. Many women representing the extreme of blood deprivation, would sink under a hemorrhage that would not be seriously felt by one more fortunately constituted. Your reporter would strongly recommend the procedure in cases promising much danger.

Unfortunately, we sometimes see cases who have deferred seeking advice until labor is absolutely upon them. In such emergencies the man of science rises to the greatest height above the mere routinest or the ignorant pretender. An arena is here presented in which the charlatan dare not engage in an encounter with the true physician.

The indication in these trying cases is to arrest the hemorrhage until either the progress of the labor removes further danger, or the uterus can be emptied of its contents. The measures to meet this indication are therefore two-fold—those adapted to the first stage of labor, and those to the second.

The tampon was the earliest resort in these cases during the dilatation of the os, and is often used at the present day with the best results. The reporter would present for your inspection, the instruments called Barnes' Uterine Dilators; they act as a tampon by compressing the bleeding vessels, and greatly expediate the dilation of the os. No accoucher should be without them.

The great measure, however, the measure *par excellence,* consists in the partial or complete detachment of the placenta. The partial detachment may be effected in one of two ways: either by the separation of the placenta from its attachments around the os (Barnes' Method), or by separating its entire segment from one or the other of the sides (Cohen's). The latter is the proper procedure in cases where the implantation is complete. The placenta is to be detached entirely from one side, and the Barnes dilator (or in its absence the ordinary colpeurynter) is introduced. The bleeding is thus arrested and the os dilates. When the first stage is completed, the membranes are to be ruptured and the presenting part allowed to descend to take the place of the dilator. If the pains be active and the fœtal relations normal, this will occur, and the patient will come happily through terrible ordeal. If the pains be inefficient, however, they must be stimulated by ergot, or uterine catheterization. Should the pains, notwithstanding these measures, not be sufficient to propel the child with sufficient force to check the hemorrhage, version, or the use of the forceps will be indicated. These need not be dwelt upon here.

But there is another class of cases to which we are sometimes called; those which, having been mismanaged in the earlier stages, or from sudden and overwhelming discharges are upon the brink of exhaustion from the loss of blood. The os is dilated, the pains have ceased, but the bleeding continues. It is in such cases that Simpson's method, as it is called, presents itself as a last hope. Version cannot at once be performed, for fear that the patient will die from the shock of the operation. This unfortunate result occurred in a case managed by your reporter, upon his advent into practice. Simpson's method consists in the detachment of the whole placenta, upon the accomplishment of which the bleeding generally ceases, and the opportunity is gained to prepare the woman for the saving operation by nutrients, stimulants, opiates and exhausted nature's sweet restorer—sleep. (1867)

Essay on the Malarial Miasm Pervading Non-Malarial Disease

CHARLES C. SHOYER, M.D., Leavenworth

Your essayist for the occasion has undertaken to give the result of his past year's experience in this city. Should he fail to interest you, he at least merits your approbation for the effort to please. We are all of us supposed to be acquainted with the contents of our text-books and the current literature of the profession, as disseminated in our medical journals. The caption of my essay presupposes that I am about to open a new source of exploration, but I am happy to dispel such illusions and assure you that what I am about to communicate is well known to all of you, though not contained in text-books or journals. It has doubtless occurred to all of you, in prescribing, to notice irregularities in the normal course of diseases, this I take it is common to all countries, but in Leavenworth there is a tendency for diseases to merge into a periodical form; I do not wish to be understood as denying that it may not prevail in other parts of the State, for I believe it does; a better way of expressing myself would be to say that periodicity complicates non-malarial diseases. You find it in treating pneumonia, pertussis, bronchitis, diarrhœa, dysentery, dentition and the eruptive fevers. If you perform a capital operation, as an amputation of the thigh performed by a surgeon of this city, you are apt to encounter a sympathetic fever that will only yield to quinine pushed to cinchonism; the same holds true of minor operations; for in a case of hemorrhoids that I operated on, assisted by Dr. Carpenter, pains of such intensity came on in the abdomen, after the operation, that it suggested peritonitis, especially as there was vomiting, extreme tenderness to pressure, constipation, etc.; but there was wanting the characteristic pulse, and peritonitis, except in the puerperal state, is a rare disease. Watching closely, Dr. C. and myself noticed a periodical tendency, and quinine cured the alarming symptoms. You treat cephalalgia, neuralgia, myalgia, and even rheumatism better and more speedily if you combine with or administer simultaneously, the great specific and your other remedies. I have in mind a case that I saw in consultation with three other physicians, a case of great interest and danger—chronic dysentery —which resisted in turn all the remedies exhibited, but upon adding quinia to our treatment the case at once improved and recovered in a very short time. This case was so dangerous as to be considered hopeless; a suggestion was made that there might lurk a malarial basis, but the closest scrutiny failed to unveil it and it was only proven to exist by the employment of the remedy.

Even in cervicitis I have found quinine indispensible to a perfect cure; I do not wish to be understood as meaning all cases. A case of odontalgia, in a pregnant female, resisted all the remedies employed excepting quinine and it was employed last. Two cases of hysteria showed a periodical tendency and were cured by it. I saw a case of insomnia with pains in the loins and extremities, no thirst or signs of fever; the fact of the pains and the patient falling asleep about 5 A.M., suggested a probability of periodicity, which treatment proved to be correct. I am at present treating a case of chronic albuminuria in which there occurs copious hypercatharsis every night at 1:30 A.M. I ordered quinine in sufficient doses and the hypercatharsis ceased as soon as quininism was induced; there was no action from the bowels at other times excepting ordinary stools: A friend has informed me that this periodical tendency of disease is so common in his practice that he now gives quinine in almost all diseases, and pushes it to its full effects, and is rewarded with success in many cases, where formerly he met with disappointments innumerable.

To illustrate the object of this paper I will take a case to typify—say a case of pneumonia; the patient will tell you he is worse in the forenoon, has great thirst, feels nauseated and chilly, has pain in his legs, etc.; his friends will inform you voluntarily that the patient has bad spells, is delirious, coughs more, is exceedingly restless, etc., etc.; your own observations on visiting at different hours of the day confirm the above, and lastly, the treatment proves that a malarial taint was underlying the principal disease. This malaria does not especially render the pneumonia, or any other disease it may complicate, more dangerous, it simply seems to protract it. I have taken two cases of pneumonia complicated as above and treated them alike, with the exception of withholding quinine from one; the case getting quinine convalesced rapidly as in ordinary uncomplicated pneumonia, the other deepened into a continued form of fever, the cough grew worse, delirium was greater, skin hotter and dryer, respiration more frequent and labored, thirst extreme, expectoration scanty and very viscid and but slightly rusty, pain in chest far more severe, pulse ranging from 120 to 130; these grave symptoms all yield promptly, in

a short time, as soon as the system was brought under quinine. There are some points in the treatment that are of importance. In continuing your medication the prolonged use of quinine deranges some of the organs and functions; for instance, in two cases of dysuria complicating intermittent fever, the dysuria complicating intermittent fever, the dysuria yielded at once on discontinuing it. In two cases of remittent fever its prolonged use occasioned some gastroenteric trouble, such as abdominal pain, furred tongue, nausea and vomiting; it also disturbs the nervous system, causing cephalalgia, dilated pupil and considerable agitation. These symptoms were not due to the fever but clearly resulted from the quinine.

Some of the most observable symptoms, as a result of the long continued use of quinine in large doses, say five grains daily, after having once pushed it to its full physiological effects, are a flushed face, dilated pupils, pain in the stomach and abdomen, thirst, etc., and a marked feature is the protracted convalescence occasioned by it. I have sometimes continued quinine for these very symptoms, and only discovered my error on discontinuing it and pursuing the expectant treatment. It may be asked how I will prevent these pathological effects of quinine. I reply that this is not always possible, but I think hydrochlorate of ammonia, which I am in the habit lately of giving after discontinuing the quinine, has been productive of some good. I think that the tongue cleans more rapidly, and the unpleasant effects of the quinine disappear more promptly under its use than when the case is left to nature. It is also well known as an anti-periodic and of itself capable of curing periodical fevers. As to the dose of quinine I consider it a very minor import; my plan is to give three grains every two hours till there is a ringing in the ears; if I wish a more speedy action I give six or nine grains at once and then three grains every two hours, or hourly, till I obtain its effects; afterwards a daily dose of two or four grains. I supposed at one time that malarial taint was not prevalent in winter, more extended experience has convinced me to the contrary, and I find that it exists during the entire year, only more violent during spring and autumn. I have observed it in summer complicating cholera infantum, and in a case that was nearly abandoned as hopeless, having in turn baffled all the usual remedies suggested by a consultation of physicians, quinine in two grain doses, per enema, for a child of sixteen months, repeated every eight hours, performed a cure. I saw in February last a lady aged 45 years, who presented many of the features due to tuberculosis; she had lost considerable flesh, had a poor appetite, bad cough with copious expectoration; father died of this disease; had been pronounced consumptive seven years before, had pain in the left chest, had hectic flush on cheeks every afternoon, pulse 90, respiration 33 per minute, jerking inspiration; but this was not tuberculosis; percussion sound clear on both sides; auscultation showed that air permeated every portion of both lungs. Now I did this; I compromised the matter; I ordered quinine pushed to its anti-periodic effects and told her to take cod-liver oil and whiskey; in three days she was well—yes, well. She kept the quinine down and vomited the oil and whiskey. I have thus hurriedly run over a subject that merits greater attention than I can bestow on it and present it in this unfinished manner; it was intended for our local medical society, where the members read essays at our semi-monthly meetings. I must apologize for not reading one more worthy the occasion, and can only hope such feeble efforts will stimulate others to produce essays fitting our young society. (1867)

Dr. Root offered the following preamble and resolution which were adopted:

WHEREAS, The medical profession has ostensibly in charge the lives and health of the people, and whenever, from any cause, pain and disease, or death, are present or apparently approaching, medical aid, consolation and advice are sought by mankind, thereby recognizing the physician as the true index and source of that knowledge and wisdom neccessary to alleviate, and, as far as possible, to prevent the diseases, pains and sufferings, and death of mankind, therefore—

Resolved, That it is the high and solemn duty of each medical practitioner to instruct and protect humanity publicly and privately; and especially to become, before the world, perfect patterns of physical and moral purity, and thus by combining precept and example, cause the human race to seek a higher sphere of usefulness and happiness. (1867)

Report of a Case of Chronic Diarrhoea to the Kansas State Medical Society

J. W. BROCK, M.D., Leavenworth

You are all familiar with the subject of my essay, both theoretically and practically, as all of you have had the disease in its acute or chronic form. If you never have, you should have, if for no other purpose than to test the calibre of your guts—I mean diarrhœa.

I propose to say something of the treatment of a case of chronic diarrhœa that I have had under my charge for some time. I commenced this case last December, and only succeeded in imparting the glad news to my patient that he was well, about two weeks since, and I only did so then, because I thought that spring and warm weather had really come, and I could not require any more fuel for my stove, as I burn coal, and my patient deals in that article, so you can readily perceive my motive in thus prolonging the case.

I learned from my patient that he contracted this disease in the fall of 1864, while in the army. He had all the symptoms of the disease, which it is unnecessary to give in detail. He had, previous to the time I took charge of the case, several attacks of hemorrhage of the bowels, which came near terminating fatally. He had an average of eight operations of the bowels in twenty-four hours, which were attended with excruciating pains and no pleasure. The bowels were badly swollen, appetite poor, digestion imperfect; never slept more than four or five hours during the twenty-four, and that was not attended with the amount of refreshment that an individual with a clear conscience and sound stomach and bowels usually anticipates. I asked numerous questions—many of them foreign to the case. This I had to do to impress upon his mind the importance and dignity of my profession, and to make him conscious that there really was something in the healing art. He had been treated by other physicians, some of whom I knew were as likely to accomplish a cure as myself, but he said that they had failed—whether attributable to the doctor or patient I am unable to say. He invariably was aroused in the morning at three o'clock (this, he said, was a sure thing), and from that until daylight, he suffered intense pain. I thought this had the appearance of periodicity, so there I stuck a pin (any one else would have thought the same). I had learned from others—the source from which I derived the bulk of my knowledge—that there was virtue in an exclusive milk diet in cases of this kind. I therefore put him upon a milk diet. I tried this as long as I thought prudent, knowing that Leavenworth boasts of other physicians none the less known to fame than myself, I thought it advisable to medicate some. I will give you a list of remedies used, not stopping to give you the number of grains and scruples, drachms and ounces of each medicine, as you are all familiar with the dose and effect of each remedy.

I gave opium, tannin, bismuth, all the Ferruginous preparations, many of which are said to contain active emmenagogue properties, mercury in various forms, nuxvomica and its salts, quinine, castor oil, turpentine, assafœtida and bourbon whisky. Of the latter I had him keep a liberal supply, because it is a remedy that few persons refuse to take—said to be good to aid digestion.

Of the local applications, I used mustard, mush, hops, cantharides and tincture iodine. I attribute the cure to the following remedies: Argenti nitratis, gr. ½; ext. opii, gr. ½; quinine, gr. 5; to be given three times a day; to take half an ounce bourbon whisky after each meal to aid digestion. When the bowels are uncomfortably distended, take assofœtida. Locally, I applied tincture of iodine to the abdomen at night, and repeated as I thought necessary. Allowed him beefsteak rare, mutton chops and rye bread. I think that his stomach and bowels became thoroughly disgusted with the quantity and quality of medicine administered and fearing that I had a reserve in store for them that would out *nasty* assofœtida, they concluded to yield and act like other peoples' guts in the future. Had they not done so, I would have brought forward my reserve, as I was confident the man would soon apply to some one else, perhaps, and who might have cured him with something that I have not yet seen or read of in the dispensatory, and thereby pluck laurels from my professional brow which justly belonged to me. But luckily for the man, and his stomach and bowels, they yielded. Had they not, I had in store for them one more dose, which will cure or produce a case of diarrhœa, and that was a heroic dose of impeachment. (1868)

Resolution Relating to Medical Education

The secretary read a communication from a committee of the American Medical Association, enclosing resolutions of the association on medical education, and requesting the action of the society on them.

Dr. Logan offered, for adoption by the society, the following preamble and resolutions, which embrace the resolutions of the National Association, viz:

WHEREAS, The subject of medical reform, which has been so persistently agitated by the profession for the past twenty years, has been barren of any practical good results; because partly of the great diversity of opinion as to *how* and upon what terms the reform could be instituted; and

WHEREAS, In the present influx of population to the State, we are being flooded with medical adventurers of all hues and pretensions, and the time seems most propitious for making a decided step toward the suppression of an evil, which only grows stronger and more deeply-rooted with age; and believing it impossible to digest a plan, which shall be perfect in detail, save through the corrective results of a long and ripe experience; therefore,

Be it Resolved by the Kansas State Medical Society, That this society does hereby accept as a basis for action, the report of the committee *On Various Communications and Propositions from Medical Societies, etc.,* made at the last meeting of the American Medical Association (May 1869), and does hereby adopt in part and whole the accompanying resolutions, which report and resolutions are in the terms following, to-wit:

Report of the Committee on Various Propositions and Communications from Medical Societies, etc.

After a fair examination of the various propositions concerning medical education, medical legislation, and ethical regulations for medical colleges, referred to your committee, we respectfully submit the following report:

WHEREAS, The history of medical legislation in the various States of this Union, clearly shows that no reliance can be placed on either the uniformity or the permanency of any laws relating to the practice of medicine; and

WHEREAS, The results of all the efforts made during the last twenty-five years, to elevate the standard of medical education, through concert of action among the numerous medical colleges of this country, have proved with equal clearness that such concert of action, in an efficient manner, is unattainable; therefore, be it

Resolved, That whatever is done to establish and maintain a just and fair standard of medical education throughout our whole country, must be done by the profession itself, through its own voluntary organizations, in the same manner that it now establishes and enforces its code of ethics. The profession is as competent to declare, through its representatives to the national, State and local societies, what shall be the standard of attainments for those to be recognized and admitted into its ranks, and to establish the boards or agencies by which compliance with such standard shall be ascertained, as it is to declare what shall be the ethical rules governing the conduct of those already admitted.

Resolved, That this association earnestly requests each State Medical Society to appoint annually one or more Boards of Examiners, composed of five thoroughly competent members, whose duty it shall be to meet at suitable times and places, for the examination of all persons, whether graduates of colleges or not, who propose to enter upon the practice of medicine in their respective States, except such as have been previously examined and licensed by a similar Board in some other State.

Resolved, That each State Medical Society be requested to make such regulations concerning the pay of the Boards of Examiners, and the fee to be charged for a license to practice, that the former shall in no case depend on the amount received from the latter.

Resolved, That each State Medical Society be requested to require its Examining Board or Boards to exact of every applicant for examination, adequate proof that he has a proper general education, is twenty-one years of age, and has pursued the study of medicine three full years, one-half of which time shall have been in some regularly organized medical college, whose curriculum embraces adequate facilities for didactic, demonstrative and hospital clinical instruction.

Resolved, That each State Medical Society be requested to act on the foregoing propositions at the next regular annual meeting after the reception of copies of the same, and if approved and adopted by the State Medical Societies of two-thirds of the States, this association shall deny representatives from all organizations who longer refuse to comply with the same, and shall recommend the State societies to do the same, and all persons who, after that date, seek to enter upon the practice of medicine without first receiving a license from State Board of

Examiners, shall be treated ethically as irregular practitioners.

Resolved, That in adopting the foregoing resolutions, by which it is proposed to treat the medical college diploma the same as the diploma of any literary college, this association is actuated by no desire to injure the medical schools of our country. On the contrary, by the adoption of the fourth resolution at the same time that the mere college diploma is practically nullified, it is the desire, and confident expectation, that those institutions will be greatly benefited; because they will be forced to rival each other in the extent and efficiency of their courses of instruction, instead of the number of diplomas which they can annually distribute.

All of which is respectfully submitted.

N. S. DAVIS,
PAUL F. EVE,
E. S. GAILLARD,
E. LEE JONES,
J. K. BARTLETT.
(1870)

Report of Committee on Surgery

J. W. BROCK, M.D., Leavenworth

I present the subject of cancers for your consideration. It comes within the domain of surgery. Since our last meeting I have had an opportunity of examining some cases of cancer, both on the living subject and cadavera.

What is the origin of cancer? Does the disease consist solely in a local change of structure, or is it the local determination of a general morbid condition of the blood, or are the blood and the tissue equally interested in its formation? It is not surprising that surgeons have come to regard cancer from the first as a constitutional or blood disease. Indeed it is no easy matter to account for all we observe in cancer without adopting some such view. On the other hand, there are many facts which oppose themselves to it, and there are other modes of accounting for some of these characters which most strongly support it. It may seem that, practically, the question is not worth discussing.

If cancer be a constitutional disease, we must strive to find some corrective to the constitutional taint. And we should try in that case to determine whether the local disease is the result of some error in the organizing or nutrient function of the tissues, or whether it is the actual deposit of some poison previously existing in the blood. Then we might have reasonable hope of being able to do what as yet has proved beyond our reach—to cure or even modify cancer by general treatment. But if cancer be, at any period of its existence, a purely local disease, we should hope that by earlier and more complete removal, better and more generally permanent results may be obtainable than we can at present boast of. Virchow and many German pathologists maintain that cancer is not to be regarded as a blood disease, although a constitutional tendency may exist. They claim that cancer and some allied diseases partake more of the nature of parasitic disease than of the results of previous blood poison.

I cannot suppose that there is any material in the body which must work itself out of it, and which selects this situation, or that, indiscriminately; or, perhaps, makes use of one in preference to another from finding a tissue prepared for its reception. I cannot suppose that there are various kinds of this morbid material—one breaking out as scirrhus, another as epithelioma, etc. If the cancer poison be of one kind only, we should surely find it more frequently appearing in the same subject, at one time as encephaloid, at another as scirrhus, at another as epithelioma, or some other form of malignant disease. Yet this is seldom the case, though it does occur.

Let us consider some of those special characters which have led to so firm a belief in the blood origin of the cancer. Perhaps that which seems to be the most conclusive evidence to the large majority of those who hold this view is the almost constant recurrence of the disease after removal. Entire and permanent immunity does occur, but it is rare. In such cases it would be said, first, that the blood poison having having worn itself out, or been eliminated by the formation of a tumor, no further development took place when the local tumor was removed; or, second, that two conditions were necessary for the formation of cancer—one, the blood-poison, the other a fit state of tissue in which it might manifest itself; and that a tumor having been removed, there remained no fit nidus for its reproduction.

These cases of permanent cure after operation are, we may admit, exceptional. The more common event is that, after removal of a tumor, in favorable cases there is immunity for a longer or shorter period—some months or some years. Is the blood diseased during this time? Are the other tissues free from

disease? It is most important here to consider the mode of recurrence of the disease.

It is a recognized fact that cancer rarely returns either in an organ corresponding to its original seat, or indeed in any organ which is the usual seat of the primary disease.

A cancer in the breast rarely returns in the opposite breast. An operation may so change the tissue of the part operated on as to make it a fitting seat of future disease. But this will only apply to those cases in which the return is in or around the cicatrix, not to those where distant lymphatic, or lungs, or other internal organs are affected, the cicatrix remaining sound. And still the difficulty of accounting for the fact that, with a cancerous state of blood existing for a length of time, no recurrence takes place in the organs most prone to the disease would remain the same.

The influence of local condition must be at least more powerful than that of blood. So much is said and written about cancerous cachexia, that cachexia comes to be regarded as a necessary associate of cancer. Hence we too frequently rely upon it as a means of diagnosis, and conceive that a disease cannot be cancerous because the patient's health is good, whereas, in reality, cancer, especially in early and middle life, fastens itself often upon those who are well nourished and florid, who seem the most healthy and so give promise of life.

Tumors are discovered and allowed to grow till too late for removal, the patient, or perhaps the medical attendant, considering that there was nothing of consequence in them because there was no appearance of cancerous cachexia. In reality, however, the fact that a tumor is developed in the breast of a person in otherwise sound health, and over thirty: a tumor painless, and only discovered when already of some size, is enough to justify a more than suspicion that it is a cancer. If cancer should ever be removed by operation, I suppose few will deny that the sooner it is done the better. But what chances of successful removal are daily thrown away owing to the presence of those very conditions which should most surely excite suspicion in the mind of the surgeon. It may be asked what is practically gained supposing these views are established? Little or nothing, I admit, with our present knowledge, except this, that we should know the direction in which we should work. In the first place, it is clear that if removal be the practice adopted—and I believe that in all fair cases it is the proper one—the earlier the operation is done the better. This I consider a positive rule. It is true that very early operations are very often very unsuccessful, and late ones very successful. But the tumor will often tell us why. When you remove a tumor that is highly vascular and juicy, and the tissue around containing minute dark specks of cancer, such tumors would be very likely to return. The most successful results follow if the parts are widely removed.

I will report a few cases:

Case 1.—A patient of Dr. Thomas, aged about 60 years—cancer of the pyloric orifice of the stomach. I saw him before death and learned something of the history of the case. Assisted at the *post mortem.* The most striking peculiarity of this case was the absence of acute, lancinating pain. The diagnosis was correct. We suspected atrophy of the liver, but it did not present any appearance of atrophy.

Case 2.—Treated by Dr. Stormont, of Topeka, and other physicians. My impression is that Dr. Stormont diagnosed it cancer; others had arrived at a different conclusion. Dr. Thomas treated him a short time before his death. This was rather an obscure case. He presented some of the symptoms of ulceration of the stomach, with splenitis and dislocation of the latter organ. *Post mortem* showed cancer of the stomach.

Case 3.—A farmer about 45 years of age. Some twenty years before I saw him he had received an injury of the face, the extent of which I have forgotten. He recovered with the exception of a discharge from the right nostril. This discharge came from the antrum, in my opinion. At intervals he had severe neuralgic pains. About one year ago I saw him at Dr. Weaver's office in consultation. He had been suffering agonizing pain in the right side of the face and head for some time. After suffering for some time a swelling made its appearance immediately under the right eye. Pus was suspected and an incision was made into the swelling. Dr. Weaver and myself probed the parts and examined them carefully, finding some softened bone, which gave the impression of caries. From some of the symptoms present, we entertained doubts as to its benignant character. In about two weeks we were called on to operate, as we told the patient at the time that an operation would have to be performed. Dr. Weaver being engaged, Dr. M. S. Thomas, and Dr. Wood, the family physician, saw the case with me. During this time there had been a rapid growth of nodular tissue of the right side of the face, extending downward to the inferior maxillary. The case was no longer an obscure one, as it now presented every indication of cancer. I operated by making an incision extending from the inner angle of the eye to the middle of the ear of the right side. Another incision extending from the first named point to the angle of the mouth, turning back the flap and removing all the cancerous tissue and diseased bone that could be detected. The patient improved and did well for a month, but in a short time the disease returned with renewed violence, and soon destroyed his life.

Case 4.—Two negroes became pugilistic, one struck the other a heavy blow with a weight on the upper

lip, directly under his nose, which of necessity came in contact with his lip. The lip was mashed into a black jelly; his front teeth were caved in. He replaced his teeth, and was able to masticate with them in a short time, although they remained loose to some extent. This was three years ago. The teeth gave him occasional pain, and in time there was a fungus growth on the gums. I saw the patient first, about September of last year; examined the parts, and was not entirely satisfied as to the nature of the difficulty. I did nothing at the time; was informed by the patient that some portions of the fungus growth had been removed by another physician. I explained to him about the nature of the difficulty and what the operation would be. He left, and I saw him no more for two months. When next I saw him, I felt confident that it was a cancer, involving the injured parts and also the superior maxillary and bones of the nose. The mouth was rapidly filling up with fungus. He consented to an operation. Drs. M. S. Thomas and Van Duyn assisted. I removed six front teeth and then made a section of the superior maxillary. Here we rested.

After carefully surveying the ground, we concluded not to interfere further, as another operation would necessitate the removal of the whole of the superior maxillary, nasal bones, and, in all probability, his eyes—then with no prospect of a permanent cure. We used no chloroform. In a very short time the mouth began to fill again with the nodular tissue, a part of which I again removed. It is surprising how very rapidly it grows. I consider this case one of simple injury—of a local character, one that would have insured success by an early operation. What gave rise to cancer in this case, I am sure I can't tell you. I know there was a constant source of irritation; but why not necrosis or caries instead of cancer? I examined the juices of some of these cases, and others examined them—under the microscope—but with no satisfactory results. (1872)

Family of Seven Persons Poisoned by Arsenic

JOHN W. PARSONS, M.D.

Old P. quarreled with his family, procured three drachms of arsenic, put it into a can of milk and left the country. A few hours afterward the family consumed the milk for dinner, and in two hours they were all very ill, all but two were vomiting. All complained of burning pain in the throat and stomach, there was dryness and tightness in the throat, cramps, clammy sweats, great weakness, intense headache, some had diarrhœa with griping pains, some were in bed and were sure they were about to die. I immediately made a copious solution of the sulphate of zinc and gave it very freely until all were freely vomiting. I then gave the subcarbonate of iron very freely, mixed with water as thick as cream, and as fast as it was vomited would repeat the zinc followed with the iron.

Towards morning some of them were asleep and by daylight all were convalescent. I believe the subcarbonate to be as good as the hydrated peroxide. (1867)

Report of Committee on Climatology

TIFFIN SINKS, M.D., Leavenworth

It has been said that the best physician is "he who can bring to bear on his cases the greatest number of relations." It is therefore incumbent upon us to acquaint ourselves with all fact and conditions which indirectly, as well as directly, influence health, or are productive of disease, for even when so informed, the difficulties in diagnosis are only less abundant than those attending a rational therapeusis.

. . . . .

Climate originally signified a slope or zone; the present definition, however, is much broader and more comprehensive, meaning "the condition of a place in relation to the various phenomena of the atmosphere, as temperature, moisture, wind, etc., especially as they effect animal life or man," being variously designated as hot, cold, temperate, humid, dry, insular, continental, maritime, uniform or variable, as any one or more of these conditions predominate.

Climate depends primarily upon the relative position and motions of the earth, with reference to the sun; and, secondly, upon the vertical configuration of the surface of the earth, and the relations of land and water to each other.

. . . . .

The latitude, altitude, temperature, direction and force of the winds, barometric pressure, and hygrometric condition of the atmosphere may be the same in two places, and yet the climate, in a medical sense, essentially different. The difference may depend upon drainage, or the condition of the soil, or both, so that in determining the climatic influence on health of any locality all the elements of the problem should be considered. The latter conditions, however, being largely within the control of man, and susceptible of modification, or even radical change by intelligent procedure, need not disturb our calculations.

. . . . .

The diseases most likely to be cured or alleviated by the benign influence of change of climate, are the following: Pulmonary consumption, chronic bronchitis, asthma, the various forms of dyspepsia, chronic gout and rheumatism, obstinate neuralgia, and the general class formerly mentioned as having been bed-down to chronic invalidism.

There is a class of diseases under the general head of malarial which find their greatest expression in the tropics, gradually shading off toward the poles. The changing of the seasons which transfer a tropical temperature in the summer to the forty-second parallel north, and in winter a cold zone as far south as the Gulf of Mexico, exercised a marked effect upon diseases of this class in particular. So that, when we speak of the climate of any locality in reference to its effect upon particular diseases, the particular period of the year must also be taken into account. It would hardly be considered a judicious proceeding to advise a person whose condition required a relaxing climate to spend the summer in New Orleans and risk the hazards of succumbing to yellow fever. From the Atlantic coast westward to the Rocky mountains, the isothermal lines pretty nearly accord with those of latitude, and the amount of rain fall is substantially the same with the exception that from the Mississippi River westward, there is a gradual decrease in quantity. The differences, therefore, in the medical climatology of those districts in the United States lying within the same parallels of latitude are of a local nature, being chiefly dependent upon the character of the soil and the natural drainage. Where the soil is rich and the country but poorly drained, giving rise to a luxuriant vegetation, malarial diseases are peculiarly abundant and of a severe type.

The transition from the general to the special brings us naturally to the consideration of the climatology of our own State, a brief outline of which is all that the limits of this article will allow.

The State of Kansas lies between 37° and 40° north latitude, and between 94° 30 minutes and 102° west longitude. The eastern border is elevated 900 feet above the level of the sea, and gradually ascends toward the west at the rate of about three feet per mile. The surface is that of gently undulating prairie, interspersed with numerous streams, the margins of which are skirted by timber. The general direction of the principal streams is from west to east. There is an entire absence of lakes, swamps, and marshes, and the streams seldom overflow the alluvial bottoms along their course. The natural drainage of the State is most excellent, the descent of the beds of the streams being sufficiently great to produce rapid currents.

The measure of moisture precipitated in rain and snow for the year averages 31 inches at the eastern

border of the State, and 24 inches at the western border, gradually decreasing toward the west.

Observations at Fort Leavenworth for 35 years, give the following averages for the seasons: Spring months, 7½ inches, summer, 13; autumn, 7½, and winter 3½ inches. The precipitation of rain for the month of March, shows a small increase over that for either of the winter months. The quantities are doubled in April and again doubled in May, the mean maximum occurring in June and the minimum in January. The geographical position of the State, its proximity to the plains, its exposure to the cold currents from the Rocky mountains and the warm ones from the Gulf of Mexico, the conflict of these with the great normal west wind of the temperate latitudes, all combine to produce confusion from which it is almost impossible to eliminate anything that may be called general. However, the prevailing winds in the summer are from the southwest, south, and southeast; in the winter from the northwest, north and northeast, in the order of frequency as enumerated. During the spring and autumn these points are about equally represented. Direct east or west winds, except of a fitful character, are quite infrequent. The average force of the winds is greater than that for the Central States east of the Mississippi, and they are also more constant. The annual mean temperature at Leavenworth is 52°, at St. Louis 54°, at Cincinnati 53°, at Pittsburgh 51°. There is also quite as close a resemblance in the monthly mean temperature at these points, showing, as before remarked, that the isothermal lines pretty closely correspond with the lines of latitude.

From the foregoing the natural inference would be that the prevailing diseases in Kansas were similar to those of the States lying east of us, and between the same parallels of latitude. In a general sense this is true, but the general drainage of the country, the porosity of the soil, the purity of the atmosphere, and the fact that the winters are quite dry in comparison, all contribute to reduce in amount and virulence all the various malarial disorders, and in the winter particularly, inflammatory diseases, notable among which may be mentioned pneumonia and rheumatism. Adopting the nomenclature heretofore mentioned, the climate of Kansas would, we think, be very appropriately termed a bracing one, and without exaggeration, a very healthy one for this latitude.

The foregoing is merely a brief review of the salient points of the subject under consideration, but it is perhaps as full as would be advisable under the circumstances. While the earth continues to revolve, the sun to shine, the winds to blow, the rains to descend, and the seasons to come and go in their regular succession, we must have ever present with us the instruments for our own destruction; much may be done, however, to blunt their keen edges, and to ward them from our vitals. Climate we cannot hope to change, but it is within the compass of human ability to obtain a knowledge of its varieties, of the diseases peculiar to each, and also to modify, to a certain degree, the baleful influence of some varieties as well as to avail itself of the benign influences of others. (1872)

Dr. Thomas offered the following resolution, which after some debate, was adopted:

WHEREAS, We recognize the American Medical Association as the representative wisdom of our profession, and acknowledge our amenability to its decrees; and as it has declared in unequivocal language that certain acts on the part of members of the profession are irregular, and has declared its purpose in the following resolution offered by Dr. Collins, of Massachusetts, and adopted by the association:

"That the charge for medical examination for life insurances should not be less than five dollars."

Resolved, That the provisions of the resolution, as adopted, are binding on each member of this society. (1871)

Variola

H. K. KENNEDY, M.D., Topeka

Variola, than which no more fearful disease has preyed upon the human family in the past year, has mocked our progress in medicine, and humiliated us as a profession, with the fact that the per cent of deaths from it has been fully as great as it was any time in the last century.

As if to avenge itself for the wrong done it by Jenner, when he taught that vaccination is a prophylactic for small-pox—it has scourged all our cities, and spared but few of our towns. From Philadelphia the frightful intelligence comes that three thousand deaths in the past year, in that city, were from small-pox alone. In the coal regions of Pennsylvania this disease is sweeping the miners away without let or hinderance. Boston, Philadelphia, Baltimore, Richmond, Charleston, Nashville, St. Louis, Chicago, and scores of towns of less importance, are all helping to swell the grand total of deaths from this most horrible of all diseases, till we must bow our heads and acknowledge, in shame, that our profession attains no better results to-day than did the profession a hundred years ago.

Paint, color, or avoid the truth as we may, the humiliating fact will remain the same, that in the past year, of all cases of small-pox in the United States, at least twenty-five per cent have died.

I propose to give a brief sketch of this epidemic as it appeared in Shawnee County—its introduction and history.

In November S. H., who lived in Wabaunsee County, returned home from St. Louis; the same week was taken sick, for which he "doctored" himself for several days, and finding himself no better, he then sent for a physician, who diagnosed the case bilious fever. Before the physician made his third visit the patient died—died upon the eleventh day of his illness. Ten days after the death of H., his nurse R. was taken with a severe headache, pain in back and fever. As he lived twelve or fourteen miles from a physician, he made to Silver Lake, a village on the Kansas Pacific Railroad, twelve miles west of Topeka, and took a room with a gentleman who combines the selling of goods with the practice of medicine, and his residence is over his store. The day after R. arrived at Silver Lake, the eruption of small-pox made its appearance, where he died upon the twelfth day of his illness. The same week of his death, the merchant's clerk took the disease, and was removed to a pest house, established by the county. Eleven days after the death of R., T., who assisted in burying him, was attacked, and died on the thirteenth day. Of three hired men at T.'s place, all were attacked, one of whom died on the eleventh day. Another man, W., who was in Silver Lake the day R. was buried, purchased a suit of clothes in the store, but after imbibing freely of whisky at the various places in the village, returned home without the clothes. Twelve days afterwards he was attacked with small-pox, and died upon the thirteenth day of his illness. The family with whom he lived (consisting of seven members) all escaped, notwithstanding the house in which they lived contained but one room.

Mr. O., who purchased an overcoat at *the* store in Silver Lake, carried his little girl to school in it—she took the disease but recovered. Her sister was next attacked, and died upon the tenth day of her illness. G., who assisted in burying Mr. O.'s daughter, took the disease, and died upon the thirteenth day of the attack. A negro man purchased some articles in Silver Lake; returned to Mr. E.'s, where he was living; ten days afterwards he was taken sick; remained at Mr. E.'s till the tell-tale eruption of small-pox peeped through the skin, covering the forehead, when he was *immediately* removed to the pest-house, and died upon the eleventh day of his illness. Mr. E.'s family, eight members, all took the disease in different degrees, from the mildest varioloid to the most malignant confluent form, all recovered. In Mr. C.'s there were four children and a nephew, all adults, all of whom took the disease; the nephew and three children died, all deaths occurring before the fourteenth day. Mr. W.'s family, consisting of himself, wife and five children, took the disease; the wife and four children died; the wife and two children had no eruption to indicate the disease; for some cause there seemed to be a want of vitality in these cases which kept the disease from fully developing itself. As their home was on the bank of a large pond, known as the Lake, I attributed this want of vitality to malarial poison in the system. Whatever the cause may have been, the fact remains the same, and cannot be controverted; that Mrs. W. and her two children died of varioloid, although the characteristic eruption of that disease was not perceptible, either to the sight or touch, and there can be no doubt that this wide-spread epidemic in the county, originated from the case of H., who died without small-pox eruption ever manifesting itself; yet that he had small-pox is proved beyond a doubt, by the fact that R. who nursed him took the disease, although he had not been off the farm upon which he lived for over one month. Another fact: B., who

shaved A. and prepared him for the grave, was attacked with the disease five weeks afterwards; B. died upon the thirteenth day of his attack. Here we have another anomaly in this—an attack five weeks after exposure. You say this is contrary to your preconceived ideas of small-pox. I cannot help that; am only reporting facts as they occurred in my practice in the past winter; do not pretend to explain the causes; leave that for the curious in these matters. The disease kept spreading east till it made its appearance in Topeka, in the family of Mrs. P. Two children had the disease, one of whom died. An elder sister, out at service, after visiting her home, spent the evening at T.'s; the husband took the disease, and died on the thirteenth day. The wife and six children, all were attacked, none of whom died. The son of the family from whom Mrs. P.'s girl took the disease, died upon the thirteenth day. The father was next attacked; had a slow recovery; the mother, who was exposed, escaped; had been revaccinated a few weeks before. Through the carelessness of a nurse, the disease spread into many families. In the city pest-house, of which I had medical charge, there were in all thirty-six cases, with a loss of four, two of whom died within thirty hours after coming under my care. The total number of cases in the county was one hundred and five, of whom twenty-six died. A confluent case—Mrs. B. had the disease the second time, having had it twenty years before. Of the one hundred and five cases, sixty-five had been vaccinated—only twenty-three revaccinated, and forty cases not vaccinated at all. Of the twenty-six cases proving fatal, only five were ever vaccinated, and three out of the five revaccinated.

One man, twenty days after vaccination, which worked well, passed through the various stages to maturity, took the small-pox in the most malignant form, of which he died upon the fifteenth day of his illness. A second case was attacked forty days after a successful vaccination, with malignant confluent small-pox—recovered. I report the two above cases, not for the purpose of weakening vaccination, but report them because they are facts, exceptions to the well established, general rule, that vaccination is a preventive of small-pox. No fact is better established than there are persons who are so susceptible to the poison of small-pox, that one attack of the disease is no immunity against a second, or even a third attack. We certainly have no right to expect vaccination to be a better preventive of small-pox than an attack of the disease itself. I cannot account for this idiosyncrasy in certain individuals any more than we can tell why vaccine virus should remain dormant in the arm for several weeks, then become active, and pass through the various stages of a successful vaccination. Dr. Wyman reported two such cases to the Shawnee County Medical Society. In one case the virus had remained nearly six weeks, then became active; in the other four weeks elapsed from the insertion of the virus till it began to work.

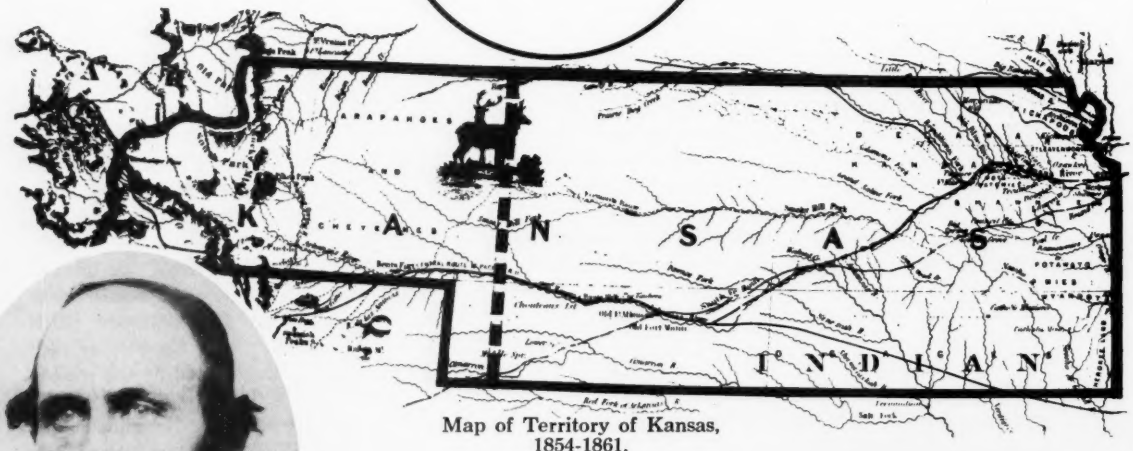
Every epidemic has its lessons for us if we will only heed them. The great lesson taught by this one is the truth of the doctrine advocated by Jenner, that vaccination is almost a certain preventive for small-pox; also the importance of revaccination, as well as that we must learn to distinguish between the true and spurious vaccination. My observation in the past winter has taught me to place no reliance in virus from a *revaccination,* especially as a preventive against an epidemic so malignant as the one we have suffered from here. Vaccination is trifled with, with most physicians, if it takes, as they express it in common parlance, it is sufficient. There is a deplorable ignorance in regard to this subject among physicians as well as the laity. When in the legislature the late Dr. Copeland, of Osage Mission, pressed a bill requiring all children attending public schools to be vaccinated by a regularly educated physician. Dr. Johnson, of Miami County, not one of that sort, very contemptuously replied: "It is all folly to require anything of the kind. A child falling upon a piece of glass can vaccinate itself if the glass has vaccine virus upon it." "Aye, if the glass has any virus upon it." It was well said; but does it not require some knowledge on the part of the vaccinator to distinguish between the true and false vaccination? It certainly does. During the past winter, when vaccination was the order of the day in Topeka (as each vaccination brought a dollar to the vaccinator), virus was procured from all sources; many physicians made no difference between that from a primary and a revaccination; a result of this carelessness was to weaken the public confidence in vaccination, notwithstanding the average per cent of deaths from small-pox in this county in the past year, has been at least twenty-six. Every medical journal, falling from the press, contains an article, the writer of which claims the honor of having discovered the means by which this Samson, which is slaying its thousands, may be shorn of its power to destroy. To-day the sulphytes are a specific; to-morrow xylol, next cohosh, and so the change is rung from one article to another in the materia medica. Still specifics, to the contrary notwithstanding, this pestilence is sweeping thousands of our fellow-citizens into the grave. Only a few days the glad tidings of great joy was published to the world by a member of this society, Dr. J. P. Root, United States Minister to Chili, South America, that he had discovered a certain specific for small-pox. A specific very simple indeed—only to convert the stomach of patient into a crucible for the manufacture of chloride of lime—only this, and nothing more

necessary to disarm small-pox of all its terrors. The Doctor, in language most vivid, describes his own case: "I was attacked very violently with symptoms of the gravest nature, being those of the 'confluent,' 'hemorrhagic,' 'scarlatinous,' and 'erysipelatous' character. Feeling the soreness of the throat increasing, counting the pulse as it gradually rose from its natural beat to ninety, one hundred, one hundred and ten, one hundred and twenty, one hundred and thirty, one hundred and forty, and more, with drops of blood oozing from the mucous surfaces and hemorrhagic spots appearing here and there on the surface of the body; with the skin, especially of the face and head, becoming more and more tumefied; with erysipelatous engorgement every hour; with intense febrile excitement steadily increasing, and being certain that speedily the brain would refuse its normal work, and hopeless delirium ensue." That the Doctor recovered as he did is evidence that he had simple non-malignant small-pox. Iron muriate tincture and prepared chalk, given alternately, is the talisman by which the Doctor disarms small-pox of its terror. As he says, the two form chloride of lime, and it is this latter which neutralizes the poison of variola. As it is well known that chloride of lime fails to destroy the infection of variola, it must be powerless to neutralize the poison in persons affected with the disease. As the fact is well demonstrated that boiling water will destroy the infection of small-pox, why not fall back upon the McElroy treatment, boiling water as a specific for small-pox. We cannot deprecate the so-called specifics enough, especially specifics for small-pox; they are the will-o'-the-wisp which allures so many men of our profession from the plain of practical, common sense to fanciful theories wove by gentlemen more fitted for poets than practitioners of medicine. If our country would be free from this terrible scourge, it must not depend upon specifics, but upon vaccination, as taught by Jenner, and by the way this epidemic has impressed upon us the importance of compulsory vaccination, for in that lies the safety of our people from another visitation like the present one, and not in specifics, although gentlemen tell us that they have discovered specifics for this disease, so none need die from it. The reputation of the so-called specifics depends upon their being given to patients with non-malignant small-pox—patients, the most of whom would recover if not treated at all. And every patient having malignant small-pox will die if treated by any specific ever heard of. When gentlemen find a specific by which they can save fifty per cent of malignant small-pox, then they may claim a great honor indeed. In the meantime if they wish to astonish the world, they had better search for the elixir of life, worry their brains in quest of the philosopher's stone, or try their hand upon perpetual motions, but for the love of suffering humanity say nothing about small-pox specifics in this day, when so many are dying from that disease.

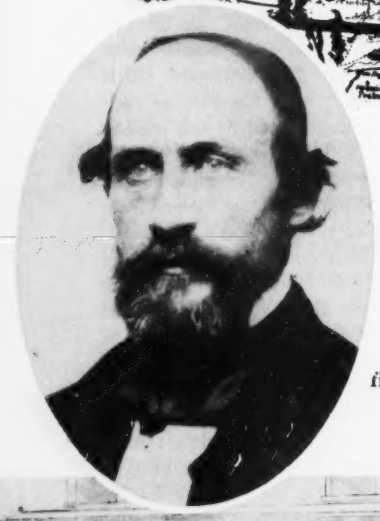
My treatment was systematic, as I regard it as the only rational treatment for small-pox. Each patient was treated according to symptoms, or each symptom in each patient was treated by the remedy indicated.

A few weeks ago we read in the Philadelphia *Medical and Surgical Reporter* a translation from the German, of vinegar as a prophylactic for small-pox. I regret very much that I knew nothing of this till near the close of the epidemic in Shawnee County, as my opportunity for fully testing it had almost passed away before I became acquainted with the claim set up. You who read the article alluded to, will remember the author failed to say how many of the persons treated with vinegar had been protected by vaccination. Mr. Boyle's family, consisting of wife, four children and her brother, were all exposed to small-pox, the husband having it in the most malignant form; all were vaccinated. Four days after they were first exposed, I ordered vinegar for them all, as recommended by the writer alluded to. The children and brother all took the disease—three mild varioloid, and two small-pox distinct. The vinegar seemed to have no control over it; the disease was modified, as we might expect, by the vaccination. Whether vinegar is a prophylactic for small-pox is a question to be settled by the profession. (1873)

When Kansas Was The Frontier



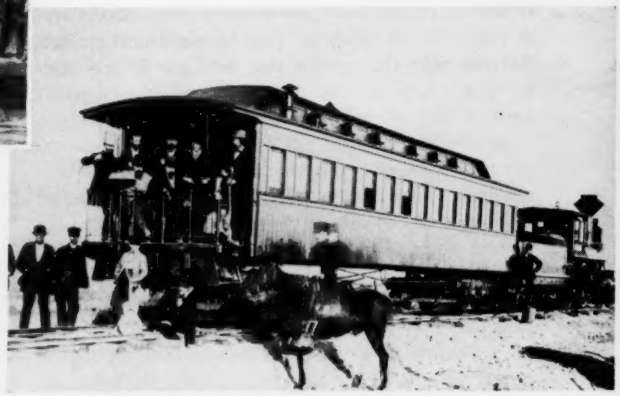
Map of Territory of Kansas, 1854-1861.



Dr. Charles Robinson, first Governor of The State of Kansas—1861.

Fort Riley Post Hospital Medical Detachment, on steps of hospital, 1870.

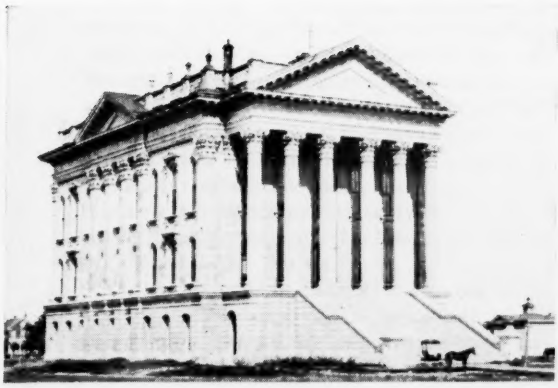
Overland Mail Coach leaving Atchison, 1866.



End of track of A. T. & S. F. Ry., 50 miles West of Dodge City, 1871.

Shooting Buffalo along The Kansas Pacific Railroad.

—And The Opening Years Of The 34th State



East Wing of State Capitol Building, Topeka, 1870's.

Old Windmill at Lawrence, built in 1863.

Planter's Hotel, Leavenworth, built in 1855.

Manhattan in 1860.

Valedictory Address (Address of President)

J. S. REDFIELD, M.D., Fort Scott

GENTLEMEN: In early time the thinkers worked with talkers for the common object of benefiting mankind. But after many years of discord the thinkers gradually withdrew, believing that they could better serve the human race by the absorption and study of phenomena. The thinkers have ever since been secretly watching the progress of events, and those undercurrents which were hidden from the masses, and in their own way quietly preparing mankind for those important changes we are now and then called upon to witness. To them it has been revealed who universally, even in the midst of apparent confusion, order and regularity reign; how even accidents, cholera and comets are all subject to the unerring laws of nature. It is no wonder that we hear such constant lamentations about failures of schemes and systems, when we find them taken in hand by empirical reformers, the natural tendency of whose minds is to deal with social matters in a narrow and piecemeal way, and who would in all probability, were they medical practitioners, treat small-pox in detail by cutting out the pustules! Advance in science can only be made by the close and thinking observer. Too many of us, no doubt, let golden opportunities pass, when by observation and thought we might have made discoveries that would have been invaluable to the profession and a blessing to mankind. It is true that we have text-books and laws laid down for our government, but it is also true that some of these laws, like the civil code, may be amended and improved. Who is there among us to-day who would dare accept his standard the practice of fifty years ago?

Many of us think we are well up in everything that is required to make good physicians and surgeons; but we must recognize the fact that there is much for us yet to learn, and it is a duty that we owe to ourselves and our profession that we should embrace every opportunity to learn it at the very earliest possible moment. We have a grave duty to perform, not unlike those in the profession who have gone before us. Changes are constantly going on, though fewer perhaps in the *materia medica* than in any other science. Astronomy struggled through many ages before the dawn of light smiled upon it, though it is now perhaps better understood than any other science. Geology has made rapid strides on the high road toward fame; yet it is in its infancy, and many generations must come and go ere it arrives at that advanced stage that we now find the science of astronomy. Geology does not pretend to go back to the creation of the world, or concern itself about its primitive state; but it does concern itself with the changes it sees going on in it now. We see everywhere, and along every coast-line, the sea moving against the land, and nearly everywhere overcoming it; wearing and eating it down, and battering it to pieces; grinding those pieces to powder; carrying that powder away and spreading it out over its own bottom by the continued effect of the tides and currents. Look at the chalk cliffs of England, which once, no doubt, extended across the English Channel to the similar cliffs on the French coast. But we do not see chalk cliffs wearing away either on the eastern or the western coast of America; and why? Simply because we have no chalk cliffs to be worn away. The action of the waves of the ocean is the same the world over, but the substances with which they come in contact vary greatly. Hence, while they may cut away the chalk cliffs along the English and French coasts, they may heave up debris and earthy matter upon other shores. We all know that to diagnose a disease in London is the same as to diagnose a disease in New York; or for that matter, the same in any other portion of the world; yet I imagine that the members I see before me here to-day would have better success in their profession in Kansas than they would in the States of Louisiana or Minnesota. While many of the diseases common in this State prevail in those States, they are of a different type, and require different treatment. The well-read physician of New Orleans might treat a case of yellow fever more successfully than any member of this Association; yet when it comes to a case of pneumonia, intermittent or remittent fever, I imagine almost any of us could treat them with equal success with the best men in those States. We all study the same books, and receive instructions from the same professors; but we do not all practice upon the same subjects, nor live in the same climate.

And now let us look back over the history of our Society, and consider whether we have done our duty since its organization. Sixteen years ago the first session of the Kansas Medical Society was held in Lawrence, which at that time was a mere village. It has since grown into a beautiful city; but can we truthfully say that our society has kept pace with the growth of Lawrence and the balance of the State? Kansas then contained but a few thousand people; now it contains more than five hundred thousand, who look to us for medical aid in their hours of sickness and distress. Are we worthy of

the faith and confidence they repose in us? Do we really merit the patronage the people bestow upon us? The founders of our society—many of whom, thanks to the beneficence of a kind Providence, are still among us—intended to organize an association that would benefit every physician who became a member of it. It was to be a place where an exchange of ideas could be turned to the best account; where physicians could become acquainted with each other, and thus cultivate a friendship that would not only be beneficial to the association, but would grow with time, and shed a halo of sunshine around the declining years of the older members; while to the new beginner in this, the noblest as well as the most responsible science known to the world, it would ever be a school of information and a source of pleasure. Here the learned and aged members could, in a terse and clear manner, impart their lives' experience to the association which could be taken up by the junior members and turned to good account, for there is no physician, however well read, but can learn something from those who have grown gray in the service. The past history of our Association has not, it is true, come up to that standard laid down by its founders, yet it has accomplished much, and its future is brighter than ever before. The daydreams of our childhood are seldom, if ever, realized; hence we should not feel discouraged if we meet with some drawbacks, but add a little more energy and a little more perseverance, and we will finally arrive at that goal which its founders saw in the dim distance.

And now, gentlemen, let me thank you for your kindness and courtesy during the brief period that I have occupied the chair to which you called me; I retire from it with the earnest hope of meeting you all again at each annual session for many years to come. (1875)

Ruptured Perineum

C. V. MOTTRAM, M.D., Lawrence

A case of perineal rupture, with sloughing of vaginal walls, caused by impacted fœtal head and forceps delivery, resulting in almost *atresia vagina,* was reported by me at the last meeting of this society. The lady had become again pregnant, and anxious to have a living child, and the question arose as to the practicability of safe delivery, at full time, and was fully discussed. The majority were in favor of the inducing of premature labor, as the only safety for the woman.

Prof. Todd, of Kansas City, visited the case with me, and we decided to allow gestation to go along to full time, and when labor came on, resort to such surgical means as might be necessary to effect delivery.

Her general health was good during the summer, though she was several times threatened with miscarriage, having very strong uterine pains, and twice, considerable "show."

On the 25th of February I was called, and found her having regular pains, but not strong. They continued through the day and night till four o'clock a.m. of the 25th, when they seemed to flag. I then administered a full anodyne and left. She slept well for some hours. The pain returned in the morning, and I was called about ten o'clock, and found them recurring with regularity and force. I sent for Drs. Stuart and Morse to assist me. The cicatricial ring seemed firmer than at the commencement of gestation. I could not introduce my index finger beyond the second joint. The pains continued strong, and I could feel the patulous os through the ring; but there was no dilation at three o'clock. I then put the patient under the influence of chloroform, and divided the cicatrix, making several incisions completely through it on each side. I then used Molesworth Dilator, using warm water to distend the rubber tube. With this instrument I dilated the ring to a trifle over two inches. The pains continued strong during the anesthesiæ, and I waited for them to bring down the fœtal head. The dilation went on to the size of half a dollar, the water sack presenting during each pain, but the head did not engage in the superior strait. After waiting some time and no progress seeming to be made, I ruptured the membranes, evacuating the waters, and found the presentation to be occipito-pubic, the occiput impinging upon the pubic arch. The pains continued energetic after the evacuation of the water, but there was no advance of the head, as the force was spent upon the pubic bones. I then made strong pressure upon the abdomen, just above the pubes, while with two fingers in the mouth of the womb, I made pressure upwards and backwards, and to the right, against the fœtal occiputs, and the head was dislodged from its resting place on the pubic bones, and entered the superior strait, making the rotation become the left-occipito-acctabula position, or first, of Baudelocque. *Very little* progress was made during the next two hours. The patient was again anesthetised and forceps applied. The descent was slow indeed, but finally the head became engaged in the bones. During

the pains I applied *all* my strength, making traction on a line corresponding to the axis of the strait, increasing the power by the leverage of the forceps, moved from side to side. In this manner half an hour or more passed, in the passage of the head through the bones; finally it entered the inferior strait, the occiput beneath the arch of the pubes, and the vertex sweeping the perineum, which was put upon the stretch and thinned out like tissue paper, threatening laceration of the floor of the pelvis, and what remained of the recto-vaginal septum as I had feared. To prevent this impending calamity, I enlarged the outlet of the passage, by two *deep* incisions, one on each side of the vagina, through the vaginal wall, labia-minora, and into the labia-majora. These relieved the tension of the perineum, permitting the delivery without accident at 5 o'clock p.m. No considerable hemorrhage occurred from the incisions.

The child was "still," but pulsation was strong through the cord. I immersed the body in a vessel of warm water, inflated the lungs, kept up artificial respiration, and did not sever the cord till natural respiration was established, the pulsation continuing in it. Just how much time was occupied in resuscitating the child I do not know, but it seemed a long time. After removing the placenta, I closed up the two last lateral incisions with metallic sutures. They healed mainly by first intention. I kept the vagina well cleansed with carbolized water and salicylic acid. After four days I inserted a sponge tent, and kept one in the vagina for the most of the time, till the incisions through the cicatricial ring had healed. The *ring* disappeared, and the vagina is capacious enough for most purposes.

From later examinations, I am satisfied that while the woman is large and seems to have an ample pelvis, she really has a *deformed* one, the promontory of the sacrum *projecting unusually,* materially lessening the antero-posterior diameter of the superior strait, the ischii also being abnormal.

In consequence of the great pressure to which the head was subjected, in being dragged through the contracted passage, there resulted paralysis of one side of the face. The child cried only on one side, and one eye stared wild and open, without winking. After a few weeks the palsy passed away, and the child is now pretty, active, and healthy.

I am under many obligations to Drs. Stuart and Morse for their very efficient assistance in conducting the case to a successful termination. (1877)

Dr. Brock offered the following, which was adopted:

WHEREAS, On the fourth day of the Proceedings of the American Medical Association of 1869, a resolution, by Dr. Moore, was adopted, that

WHEREAS, The contract system is contrary to medical ethics.

"Resolved, That all contract physicians, as well as those bidding for practice at less rates than those established by a majority of regular graduates of the same locality, be classed as irregular practitioners."

Resolved, That the interpretation of this society, the design was in no wise to effect the usual contracts rendered necessary to secure efficient attendance on the poor of the city or county; nor the contracts necessary to meet deficiency of medical officers under certain circumstances of emergency in the army. But that any person who contracts to attend families by the year at a stipulated price, or who charges less than the established price determined by a majority of the regular physicians in his locality, is in clear violation of the above resolution, and should therefore be classed as irregular. (1871)

Practical Thoughts upon the Treatment of Fractures

J. M. CARPENTER, M.D., New Lancaster

The treatment of the different forms of fracture is a question that has been agitating the minds of our surgeons and physicians from the earliest period of our medical history down to the present time; and judging from the discussion at the late meeting of the American Medical Association, it is far from being settled.

If it is a fact that shortening actually does occur in a very large proportion of the cases of fracture of the femur, under the present form of treatment—as was stated by the leading surgeons at that meeting with but one dissent—it is time that some change should be made in the form of apparatus, or in the manner of adjusting the fractures, that better results may be obtained.

And while I am willing to admit it is safe for the rural surgeon to follow the teachings of our text-books, as a rule, in his practice, I do not see how he can do so successfully in the matter under consideration, on account of the great diversity of opinion among our leaders.

Why is it, in looking over the different works upon surgery, and the catalogues of our instrument-makers, that almost every surgeon of eminence has a splint, or an apparatus, for treating one or more of the many different forms of fracture, or at least an improvement or modification of the existing ones? There can be but one answer, and that is—they are all unsatisfactory.

Under the circumstances, all can see how difficult it is for the young surgeon who is deprived of the services of an instrument-maker, on account of distance, and who has not—as most of us who practice, as has been said, at the Cross Roads, have not—the necessary amount of funds to purchase, and the building required to store the car-load of splints and machinery demanded to follow the directions of our text-books. We are, necessarily, compelled to substitute something that we can obtain easily, and which will answer the purpose equally as well, if possible, as the more complicated and expensive apparatus recommended by the different authors.

It is not the purpose of this paper to call attention to anything that is really new or novel, but simply the practical application of a form of dressing of which all have heard, and many have used, but with a great deal of uneasiness as to the results, especially when applied as the first dressing in cases of fracture. I refer to the fixed dressing, which may be composed of any material that is soft and pliable while being adjusted, afterwards hardening so as to encase the limb in an immovable apparatus, such as plaster of paris, glue, starch, etc. As I consider the plaster the best of all, on account of hardening rapidly, not shrinking in drying, and being easy of application, I always use it in preference, when it can be obtained.

The question we shall consider first is the one that refers to the time at which the dressing should be applied, as that seems to be the one that has excited the most discussion, and the views of most of our eminent surgeons are diametrically opposed to the one to which I wish to call your attention.

Agnew thinks the only proper period to apply the plaster roller in the treatment of fractures is after the inflammatory swelling has subsided, and the surgeon can calculate on the fixed dimensions of the part.

Gross approves of it, but would not apply it until the expiration of ten or fourteen days. He says: "I am myself averse to the early use of the immovable apparatus, convinced that the safest plan is to wait until there is complete subsidence of the resulting inflammation and swelling; employed earlier, it *may* induce undue compression, and thus compel removal."

Frank H. Hamilton says "that in all those fractures which are accompanied with such injury to the soft parts as to render subsequent inflammation inevitable, or probable, this form of dressing exposes to congestion, strangulation, and gangrene. Whatever its advocates may say to the contrary, the simple fact is before us, the number of accidents resulting from this practice is far out of all proportion with any yet introduced. I have met with them myself in all parts of my own country, and the journals abound with records of disaster from this source."

The above are the opinions of three eminent surgeons, and, in fact, a large majority of the surgeons of this country as well as those of Europe hold the same views in regard to the matter.

The advocates of the early use of the immovable apparatus claim most for it the first ten days, urging that this early period is the critical one in the case, and that, by that dressing, undue swelling and dangerously intense inflammation are prevented.

Professor Dawson, of Cincinnati, advocates the use of the dressing but claims that the Bavarian plan is the proper one to use, for that can be easily removed to inspect the part at any time.

I here take the liberty of copying his description of the application of the dressing according to the above plan:

"1. A coarse quality of flannel and a good article of plaster of Paris are necessary. The more open the woolen tissue the more of the mineral it will take up; cotton textures do not answer well. The plaster should be mixed so that it may be dipped up with a cup, to be poured over the limb. It should be but little beyond the consistence of cream; cold water should be used; hot promotes too rapidly the hardening process.

"2. How is it applied? Here is the key to success. It must be put on so as to press evenly all parts of the limb, or it will be worse than a failure. It must fit as exactly as a well-fitted stocking. For illustration, let us select a fracture of the middle of the leg. Take two pieces of flannel that will extend from just above the condyles of the femur to three or four inches below the heel. Sew these together in the middle by two seams about one-quarter of an inch apart; this is to form a hinge; between the seams no plaster is admitted, and it must not reach the flannel along this line. Then place this under the limb so that the hinge line may be directly in the middle. Bring the sides of the inner layer up, and join them with a seam along the tibial spine, down over the dorsum of the foot, to the space between the great and second toes.

"Now sew together the parts of the inner layer, which is below the heel—make this union along the sole of the foot to correspond in line with the junction on the front of the leg. The foot and leg are now completely stockinged; cut the superfluous flannel down so that a roach is left about one inch high. Mix the plaster, and whilst an assistant is pouring it over the stockinged leg, with the hand apply it evenly to all parts.

"Then spread it over the inner surface of the outer layer of flannel, and bring this up and adjust it to the inner layer smoothly. The hand here, also, must be the instrument for molding the parts, for pressing the plastered flannel, for adjusting it to all the elevations and depressions of the limb. When the two layers come together at the roach be careful that at this point you make the angle sharp—a right angle. Much of the excellence of the dressing will depend upon the care taken of this; there must be no want of fit, no irregularity in the line. In this you may avail yourself of the hands of your assistant, in pressing the parts into position. For the purpose of examining the fracture in this stage—or, if you prefer, you may wait twenty-four hours or longer—the stitches uniting the inner layer may be cut and the sides pressed apart, like the valves of a clam-shell.

"3. The case or splint can be kept in place after it has been divided, by cutting notches in the roach, and at each notch surrounding the limb by a fillet of muslin. The untying of these fillets allows the greatest facility in inspection.

"4. Provision can be efficiently made in compound fracture, or where abscesses have been developed in the progress of the treatment. A section can be sawed out from one seam almost to the other without seriously damaging the supporting power of the appliance. A hole can be punched where a drain is desired.

"5. If the swelling subsides so that the case becomes too loose, a mattress of lint or cotton-batting may be laid in, and the leg be again inclosed. This lining makes a pleasant addition.

"6. The apparatus fits the limb so closely, so accurately is it applied to all the elevations and depressions, that shortening cannot occur. In the leg, the ankle and knee, make the two points between which the fractured bone is extended, and when the fragments are adjusted, the limb is so completely incased in the mold that malposition is next to impossible. The same security can be given fractures at any point in the upper or lower extremity."

The plan I have adopted is different in some respects, from the old method or the above, and in some respects I think it has advantages over both.

Allow me to say that the reason there is such a diversity of opinion regarding the dressing, is owing to the fact that the directions for applying the apparatus by its advocates have not been explicit enough to be fully understood. And, in fact, the cuts, that I have seen of the dressing, after its application in the different works upon surgery, are intended to lead to a very serious error in regard to the subject.

You will notice in one of these cuts—and I think it is a fair representation of all that I have seen—that all of the toes are exposed. Now I am well aware (and I think I can explain so that all can understand) that if an immovable dressing is applied in that manner to an injured limb, that we will have, in a large proportion of cases, as Hamilton says, congestion, strangulation, and gangrene.

Let any gentlemen take a piece of tape and commence bandaging his finger at the distal extremity, and he will find that he can draw the tape quite tense without discomfort; let him do the same with all the fingers and the thumb; then take a wider bandage, and bandage the arm, being careful to have the bandage press upon the extremities of the fingers, first keeping the tension as near as possible the

same as he passes upward, and he will find that the unpleasant sensation arising is caused more by the fixed position than by the pressure exerted. For, as he becomes accustomed to the position, the unpleasant sensations disappear. When he removes the bandage, he will find that, instead of being congested, the parts will be almost bloodless.

Now, if he wishes, let him apply it as shown in this drawing, commencing above the fingers, keeping it as near as possible as tense as before, and notice how soon the fingers will become congested and painful, requiring the removal of the bandage. If the pressure is exerted at different points along the arm, the same results will follow.

This, in my opinion, is the reason, as before stated, that our friends have opposite views in regard to the practicability of the dressing, as well as the reason that the plan described by Professor Dawson can be improved.

I claim that it is important that we not only have the pressure commence at the distal extremity, but that it be as near as possible the same as far as the bandage extends, and that form which will do this best is the one we should use.

Professor Dawson, in his description, says: "If the case becomes too loose, a mattress of lint, or cotton-batting, may be laid in, in order to tighten the dressing, *and this lining makes a pleasant addition.*" As I believe it is the paramount duty of the surgeon to give his patients all the comfort he can possibly obtain for them, I use the *pleasant addition first*—that is, I envelop the limb in a layer of cotton-batting, or, what is better, cotton-wadding, as soon as the fracture is adjusted. Another reason for using the wadding is that it is elastic, consequently there is not as much danger of compression at first, and the bandage does not loosen as rapidly upon the subsidence of the swelling as it would if the unyielding plaster was next to the limb.

In regard to the bandage, if I am correct in my reasoning, we should apply it in the same manner that we would if called upon to bandage a limb which was afflicted with a varicose ulcer; and I am satisfied that if any gentleman present should ask me to bandage a limb of that description, and I should take a yard of flannel and envelop it, tying in three places, that he would consider that I was not fulfilling the indications in the premises; for we are taught that we should be very particular in such cases to commence bandaging at the extremity, and have the pressure equal upon all parts of the limb, and that it can be accomplished best by a bandage that is not too wide.

I therefore use a bandage not exceeding three inches in width, preferring the material to be cheap white flannel, although any open cloth will answer; have a good article of plaster rubbed into the bandage, rolling loosely, thoroughly wetting before using; apply the bandage carefully, the same as you would in bandaging an ulcer; have it extend far enough to cover the joint above the fracture, in order to prevent any motion of the muscles that would have a tendency to displace the fragments.

In order to get sufficient firmness to the dressing, I take pieces of flannel from two to three inches in width—depending upon the size of the limb—of sufficient length to reach from the extremity as high as the bandage extends.

Mix a portion of the plaster in a suitable vessel, about the consistency of good paint; apply to the sides of the limb with an ordinary paint brush; take the strips of cloth before mentioned, apply them horizontally to the sides, being careful to leave a vacancy in the center of the limb underneath, where I wish to have the hinge in the dressing, also leaving space above, in order to open easily, if necessary. Apply some more of the mixed plaster to the outside of these strips, and, if needed, more strips, until you get the dressing of the required firmness, the strength being limited by the amount of strips and plaster used. This, I think, is preferable to using clear plaster, as you have a much stronger dressing, with less weight. After smearing the outer layer of strips with the wetted plaster, take a wrapper similar to the outside wrapper described by Professor Dawson, and apply over all, drawing tense, but being careful to have the edges that come together in the center, upon the upper surface free from plaster, to fasten them after it hardens.

We then have a bandage that is strong and better fitting than can possibly be obtained from the Bavarian plan. The pressure beginning at the extremity, and being equal as far as the bandage extends, all that is neccessary to open this dressing is to divide the one thickness of the under bandage, which can be done very easily if we moisten with alcohol, strong brine, or diluted muriatic acid; then you have the same dressing as the one described by Dawson, but far superior in strength, compared with weight.

And I am satisfied, if the dressing is applied as above described, there will be no occasion to open, except it be to tighten the bandage, as the pressure is exerted in such a manner that, instead of producing strangulation, it will actually deplete the part, thereby decreasing the tendency to inflammatory action, and placing the limb in the best possible condition that can be obtained to hasten the union of the fragments.

Another point that is being disputed in the treatment of fractures is that of those fractures that involve the joints, as that of the condyles of the humerus, most writers claiming that passive motion

should be used early in the treatment. Dr. John C. Warren, of Boston, believes so firmly in it that he recommends "that no splints be used" in such cases, and that "the patient be accustomed to easy and daily movements of flexion and extension," and adds, "the accomplishment of this process is so very painful that few patients have the courage to submit to it, and few surgeons the firmness to prosecute it"; and to this cause he attributes the loss of the use of the articulation in a great many cases.

Prof. Hamilton says, "Within seven days, perhaps earlier, passive motion must be commenced and perseveringly employed, from day to day, until the cure is accomplished."

Prof. Gross says, "Passive motion should be commenced at the end of two weeks."

Sir A. Cooper advises, "that passive motion should be commenced at the expiration of three weeks after the accident, in the child, and a month in the adult." This practice has been recommended and followed by most English surgeons.

Miller, of Edinburgh, Erichson, Jewett, Malgaigne, South, and others, hold similar views.

I am aware that all of the above-named surgeons are men of recognized ability, and among the leading members, if not at the very head, of the surgical profession in America and Europe, and we should be very loath to depart from any of their teachings unless we have good sound reasons for so doing, and even then we should watch closely the results of our departure.

Those of you who were at the meeting at Lawrence, two years ago, will remember that I called attention to this subject at that time, and that I stated that I believed the cause of the stiffening of joints, in case of fractures, was due to two causes: first, the change consequent upon the loss of mobility that was absolutely necessary to have perfect union of the fragments of bone; second, the inflammatory action that was set up by the irritation produced principally by the movements of the fractured parts, thereby causing a blending of the tendons with their sheaths, and the binding down of the parts designed to be free by the products of inflammation. The first cause produced a condition that was easily overcome by passive motion after the parts were firmly united. But the second was the principal, and, in fact, the only one which would produce permanent disability; and consequently it was the one against which we should use our best energies; and that I believed that the indications were best met by *that plan* of treatment that would keep the parts perfectly at rest, limit the blood supply, thereby reducing the chances of inflammation to such an extent as to have but a small amount of exudation, and, consequently, but slight adhesions—and, in my opinion, the plaster of paris bandage, applied as I have described, was *that plan.*

I find, in looking over the *St. Louis Medical and Surgical Journal* of last June, that Prof. John T. Hodgen has an article upon the subject of passive motion in cases of fracture involving the joints. His conclusions are as follows:

"1. The stiffness of joints resulting from suspended motion, if persistent, should be treated by passive motion.

"2. During the existence of inflammation, from a fracture involving a joint, passive motion can only result in harm.

"3. Passive motion, after the union of fractures involving a joint, and after the subsidence of inflammation, will aid in the restoration of function.

"4. The time that passive motion should begin cannot be named in weeks, or months; but should be determined alone by the condition of the part.

"5. Perfect rest and equable pressure are the best means of preventing anchylosis, resulting from inflammation, in case of fractures involving joints."

And adds:

"I began the use of plaster of paris dressings in 1862, and have continued to use them to the present time in cases involving the knee, ankle, and elbow joints, with the purpose of preventing motion and securing uniform pressure, and I think I have never had a case injured by such a dressing. I will further add, that I have not made passive motion in any case of fracture involving a joint, until the union of a fracture was firm, and the inflammation had subsided. In the earlier part of my practice, I expended a good deal of time in trying to devise a good elbow splint that would admit the passive motion, but never succeeded in applying a hinge splint so that the center of motion in the splint and limb corresponded so exactly as to permit motion at the joint without a degree of disturbance at the site of fracture, if near the joint. To-day, I believe it fortunate for my patients that I did not succeed, for the reason that I believe that motion, *during the treatment of a fracture,* insures, rather than prevents, anchylosis from inflammatory deposit."

With the above I heartily agree, and feel assured that any member of the profession will adopt the fixed dressing in the class of cases referred to, will find that the results will not only be more satisfactory, but the comfort of the patient will amply repay him for the fears he may have had when applying the dressing; as every one who has tried the old method well remembers his feelings, as he used passive motion in those cases before perfect union of the fragments had been secured, and the slightest movement would produce great distress to the patient. For, as has been stated by Prof.

Hodgen, I believe it is almost an impossibility to apply a hinge splint in such a manner as to permit motion of the joint without displacing the fracture more or less, especially in those cases where the joint is actually involved, and they are the only ones that require passive motion at the time recommended by the authority above mentioned.

It is true that I have not used the treatment in a very large number of cases, but the results have been the same in all, and they were so satisfactory that I feel impelled to report, hoping to hear from others who may have used the fixed dressings in those cases; believing, as I do, that all that is necessary is to give the treatment a trial to have its merits fully understood.

Report of Cases

CASE 1—J. G. Child two years of age; German; very fleshy; both ulna and radius fractured about center of lower third. Cause, fall from top of shed used as a stable. Seen about one hour after occurrence. Considerable contusion of soft parts, and consequent congestion and swelling. While examining the case, I made up my mind that if I bandaged the arm, as we are taught to do in such cases, that I should have trouble, as it would be necessary to *fix* the parts; as the child was so young he could not be reasoned with, and, consequently, would be continually moving the arm and likely attempting to remove the bandage with the other hand, thereby producing pain and increasing the inflammatory action. The child being so very fleshy, and the weather warm, I was fearful of the result if bandaged sufficiently tense to hold the splints in place, unless equable pressure be exerted upon all parts of the arm. I therefore resolved to use the plaster bandage, watch the case closely, and open when necessary, supposing it would certainly have to be removed within the first twenty-four hours; but then I would have a splint that would fit the parts exactly, and it could be loosened or tightened at pleasure.

I applied the bandage as directed, being very careful to bandage the fingers first, and have the arm well protected by the cotton-batting. As soon as the dressing had become firm, I allowed the parents to take him home—a distance of four miles—instructing them if the child should suffer much, or if the ends of the fingers should begin to look purple, showing that the limb was becoming congested, to let me know immediately; on the contrary, if he seemed comfortable, and the fingers retained their normal size and color, they should wait until the eighth or tenth day, and then bring him down so that I might examine the limb, and see if any change was needed.

Being very busy, I thought no more of the case until I saw the father, five weeks afterward. Remembering then that the time had passed when he should have been at my office, I asked him why he had not brought the child down. His reply was: "Vell, doctor, I vas so busy, und de baby vas so vell, I tell mine frau he vas all right und ve vill risk it; for de baby he not cry, und his arm he not swell, und you tell me in five weeks dat vat you put on cun come off; I take him off last Friday, und de arm vas shust like it vas first—all right—und I's got de moneys to pay yo' for de job."

Remembering the old adage, "All is well that ends well"—and when did a doctor have a better ending than that to any of his cases?—I thanked the German for the fee, and resolved in my own mind that I would try the same treatment in my next case of fracture.

As it would be trespassing upon your valuable time to report all the cases in which I have used the dressing, will simply say in regard to those cases where there was but little contusion of the soft parts, that they all did well, having no trouble with the dressing, except in some cases it required opening to tighten, but in no case did I have to open to loosen the dressing.

CASE 4.—L. R. Girl, eight years of age; fell from cattle-shed, fracturing the ulna through the middle third. As she fell about seven feet, there was, necessarily, considerable contusion. Did not see the case until next morning, as parents did not think at first that the limb was broken. Found the arm very badly swollen, and the patient suffering intense pain upon the slightest motion. Administered chloroform, and applied bandage. Third day, opened to tighten the dressing, also upon the seventh day; after that no more trouble. Result perfect.

CASE 7.—Mr. M. Fracture of lower end of radius, involving the articulation, the styloid process being broken off. Cause, being thrown violently from wagon by runaway team. Seen about ten hours after accident. The gentleman being quite fleshy, the parts were much swollen and very sensitive. Applied plaster dressing; was compelled to change once, and open and tighten twice, on account of reduction in size of limb. Did not allow any motion until the end of five weeks. Some stiffness at first, but in short time motion was perfect and but very little loss of strength, unless the arm is flexed and held in such a position that the strain is upon the external lateral ligament, and even that has nearly all disappeared at the present time.

CASE 8.—Willie B. Fracture of middle third of humerus. Cause, kick from horse he was leading. Seen in about two hours. Parents had lain the arm upon a pillow, and had kept up a continual dripping

of cold water on the part, as it was the last of May, and the weather quite warm. Found the arm badly bruised from the effect of the kick. Succeeded in reducing the fracture with but little trouble, and I am willing to admit I had the fear of Hamilton's censure in regard to using the dressing in such cases. But believing as I did, that the best way to prevent inflammation was to procure rest and to reduce the blood supply, I was very careful in enveloping the arm in cotton-batting and in having the pressure of the bandage to commence at the very extremity of the fingers; drawing moderately tense, I applied it, having the arm flexed to relax the biceps, and extending up on the shoulder. I was very particular in my instructions to the parents in regard to watching the ends of the fingers, and if there was any change to let me know immediately. Did not see or hear from the case until the end of a week, and then they brought the boy to my office, reporting that he had suffered very little until that morning, and that was caused by the movement of the part on account of the dressing being too loose. I opened the dressing and found the swelling and ecchymosis nearly gone. Some of the cotton adhering to the contused portion of the arm, as it seemed quite firmly fixed, and as there was but little soreness, I left it there. Reapplied the dressing after cutting the edges so I could tighten sufficiently. It was removed at the end of five weeks, the boy in the meantime attending to any work he could do with the other arm.

CASE 10.—Willie S. Aged six years. Fracture of middle third of femur. Cause, falling down stairs. Seen four hours after accident. Limb swollen to almost twice normal size; as parents had simply placed him upon a bed, leaving the limb in the shape it was at the time the accident occurred. Administered chloroform before reducing; after reduction, applied adhesive strips to the sides of limb, extending above the knee, as recommended by Prof. Sayre, in the treatment coxalgia.

After encasing limb in plaster, which I extended above the knee to prevent any motion of that joint, I fastened a pulley to the foot of the bed, so as to have weight attached to adhesive strips sufficient to counteract the contraction of the muscles of the thigh, and keep the limb down to its normal length.

The cotton I used at first was a very poor article, and consequently it produced some irritation; I was compelled to remove the dressing the second day, but found the swelling greatly reduced; reapplied the dressing, using a good quality of cotton; patient rested well; opened the eighth day, and found the limb one-eighth of an inch longer than its fellow; swelling mostly gone. After trimming edges of bandage, reapplied, instructing parents to remove weight during the day, and allow the child to move about in the bed as much as he desired, but to be sure and attach weight at night, and if bandage should become too loose, tighten the strips which had been tied around the limb to hold the bandage in place. At the end of three weeks the child was placed upon his feet, and allowed to walk with the aid of a chair or crutches. Removed the dressing at the end of six weeks; found the limb quite strong, and instead of being shortened, it was at least one-tenth of an inch longer than its fellow. At the present time the child is not certain which limb was fractured, and it requires very close examination to ascertain the fact.

CASE 14.—Willie M. Age, six years. Fracture of inner condyle of humerus. Cause, being pushed from a high fence by a play-fellow. Seen five hours after the accident. As swelling was very great, bandaged the thumb and fingers with narrow strips before applying the dressing; adjusted fracture, placed the limb in mid-state between pronation and supination, applied the dressing carefully; opened in three days to tighten, and again at the expiration of eight days; child suffered but very little; did not allow any motion until the end of five weeks, when dressing was removed and union of the parts found to be perfect, with but very little rigidity of joint. Used friction and passive motion, and in a short time good use of the limb was obtained. At the present time he has no difficulty in moving the arm in any direction.

CASE 19.—Mollie F. Fracture of upper third of femur. Cause, falling eight feet from loft upon hard floor. Seen eight hours after accident. Treatment the same as case 10, using chloroform, being assisted by Dr. Briggs, of Rockville. Results good. Limb, after removal of dressing, one-eighth of an inch longer than the other. At the present time but slight difference in length, and use nearly perfect.

CASE 22.—C. K. German; aged thirty. Fracture of lower end of tibia and fibula, being the second variety described by Erichson, or what is called Potts' fracture. As the fibula was fractured about three inches above the ankle, and the tip of the malleolus internus was splintered off the tibia, the foot being rotated outwards. Cause, falling off horse against a bank, while running at full speed—leg being caught underneath. As can be readily understood, there was a great amount of swelling, and the parts were badly contused by the violence and the weight of the animal he was riding. Patient lived eight miles distant, and it was some time before he was seen. As I considered this one of the best cases I had seen to test the dressing, I was very careful in its application, padding the inner part of the lower end of the leg well, to overcome the de-

formity; placed wadding between the toes, and extended the dressing above the knee. Advised him to let me know immediately if he should suffer much, or if the end of toes should become livid. Seen at the end of six days, dressing removed, and additional wadding placed inside, to tighten; readjusted on tenth day, and again on twenty-first. Patient after that allowed to move around upon crutches, advising him to bear as much weight upon the limb as he could without causing discomfort, and no more. At the end of six weeks dressing removed. Accident occurred last September; at present time he is doing his ordinary work as a farmer with but very little inconvenience; limb swells slightly if used too much in walking.

CASE 24.—A. H. Age, forty years. Lower third of tibia fractured in two places; fibula in upper third. He was attempting to hitch a pair of young horses to a wagon, when they became frightened, running in opposite directions, one of them striking him in the breast with its hip, raising him from the ground and whirling him violently around, striking the tibia against the wagon tire, or some other hard substance about that width, as a piece about two and a half inches in length was broken out of the tibia, and when seen was pressed outwards about one-half inch, the bone above and below showing the depression very plainly. The supposition is, that the fibula was broken when he fell upon the ground. Seen in about twenty minutes. Some contusion, but scarcely any swelling. Adjusted the fracture, and applied dressing. Some pain on account of pressure upon anterior tibial nerve previous to adjusting fracture, but not severe. Examined on eighth day, and on twelfth was allowed to walk to dinner-table, with the aid of crutches, since which time he has moved about more or less every day. Accident occurred four weeks since; shall remove dressing when I return, and am satisfied the results will be as good as in any of the cases I have reported.

In conclusion, permit me to say that all of the cases reported are still residing in the vicinity of New Lancaster, and the results of the treatment can be verified at any time.

The object that I have had in view in the presentation of this paper is, that those who practice, as I do myself, in the country, where we have not the advantages derived from the instrument-maker that can be obtained in most, if not all, of our cities, and are necessarily compelled to manufacture as well as adjust our appliances, may obtain a hint which they can improve upon, thereby assisting them in some of the difficulties which all rural surgeons are compelled to surmount. (1879)

Atelectasis

O. P. LEE, M.D., Pleasanton

This disease consists in the imperfect expansion of the lungs by the first inspiration after birth—that is, in a permanence of the fœtal state, in the lung of the new-born infant. It is to be regarded as a disease dependent upon restricted functional development at the time of birth, and not upon any original defect of formation in the respiratory organs. When at all extensive, atelectasis terminates, sooner or later, in death; under favorable circumstances, however, in early and complete, or tardy and imperfect, recovery. During the first few days after birth, it may still be possible that the evil may be surmounted by a vigorous penetration of air; whereas, at a late period, organic changes supervene, which forever incapacitate the undeveloped portion of the lung from performing its proper function. There is, however, still wanting a complete account of this disease, as regards both materials and pathological deductions. I will attempt to furnish as accurate an anatomical description as presented in several cases which came under my observation while I had charge of the Kansas State Insane Asylum, at Osawatomie.

An entire lung, or even an entire lobe, was seldom found in a state of atelectasis; but for the most part, only single and scattered lobules.

Experience shows that certain portions of the lung are especially prone to retain the fœtal condition, namely, the inferior lobes of both lungs, and the posterior half of the remaining lobes generally. Yet we find examples occur of several lobules near the anterior surface being found in like manner undeveloped.

The diseased patches displayed brown-red, or rather bluish-red color, which is more intense if the entire lobe is uniformly expanded—in which case, it is marked off by a sharp contour from the surrounding pale-red, healthy substance. When, on the other hand, scattered cells within such a lobule have become inflated, the violet color is interrupted here and there, and passes by a gradual transition, and without any distinct boundary, into the natural shade.

A distinguishing feature of the disease is this, that the above patches upon the surface of the lungs at all times exhibit a slight depression, the superincumbent pleura remaining perfectly smooth and polished. A lobe, either entirely, or for the most part, in this condition, is never found enlarged, but, on the contrary, of much smaller dimensions than the others, and almost as much collapsed as in the fœtus, which is generally deeply imbedded within the thorax, and drawn down toward the entrance to the bronchii and blood-vessels. Hence single diseased lobules do not obtain the same elevation of surface as the healthy ones with which they are surrounded, but, as already stated, form depressions, more or less considerable, so that the general aspect may be likened to the dimples created by emphysema in adult lungs. Neither by incision nor pressure is any crepitation produced, unless when a few air-cells happen here and there to have become expanded. The delicate reddish froth is never found here as in healthy parts of the lungs, but merely a small quantity of serous, slightly sanguineous fluid. The cut surface appears smooth and uniform, without a vestige of granulations; the whole of the diseased structure is not softened, but rather of a hard character, still without the tenacity of the healthy parts. When a patch so situated is cut off and placed in water, it sinks to the bottom.

When atelectatic infants die in a few days after birth, it is generally possible to dilate, artificially, the undeveloped parts. The depressed lobe is then seen to rise, by degrees, to the level of the rest, and assume the color, permeability, and other characters of sound lungs up to this point; had other circumstances been favorable, perfect recovery might have taken place.

When, however, the little patients have survived for weeks or months, this infiltration seldom succeeds, or only imperfectly. At this juncture, the unexpanded pulmonary cells are for the most part coherent—a remarkable fact, seeing how long the lungs continue to remain unexpanded in the fœtus without adhesion even taking place. Whatever ulterior transformation goes on in the diseased parts—which is not satisfactorily determined—it is, however, more than probable that not a few indurations, especially the small calcarerous concretions, sometimes occurring without any obvious cause, at particular spots within the general structure of the lungs (generally at the back of the inferior lobes), are, to some extent, referable to the above sources. At all events, it may be observed generally that, in atelectasis, the boundary-line between the diseased and healthy substance becomes less and less distinct in proportion as life is prolonged.

At the earliest period of infantile existence the contrast is very decided, the diseased parts being immediately surrounded by pulmonary texture in all respects natural and healthy. In infants who die of

atelectasis, invariably will be found the *foramen* of the heart unclosed; a fact confirmed by observation, which at that stage of life is not unusual. The brain usually is found in a congested state. When death follows soon after birth, the body has the appearance of being generally developed, but is extensively ecchymosed; the hands and the toes usually are clinched, accompanied with foam in front of the nostrils at the closed mouth. When, however, the disease has been of long standing, the body is usually wasted and wrinkled. Under these circumstances, both the affected and the adjacent parts are found inflamed, if not in a state of suppuration. Inflammation is not necessary, and not frequent, in the sequel of atelectasis. I have never met with a case of inflammation which could be traced directly to the diseased lobe.

I would here state that atelectasis, with the characteristic features above described, is not at all times distinguished from other diseases, that condition not having been duly recognized, and frequently has been confounded with other similar pulmonary diseases. I am here under the necessity, however hazardous it may appear, of submitting these discordant views to the ordeal of critical examination.

French writers who first turned their attention to the changes in the pulmonary texture of new-born infants refer to this disease under the head of *pneumonia lobularia.* The German writers have, to some extent, adopted the same view.

In atelectasis, the coloring of the diseased portions of the lung approaches to a violet, their exterior appearing smooth and glistening, so as to contrast with the dull, brown-red surface of inflammation. In inflammation, again, the diseased portions are preternaturally distended, while in atelectasis they are collapsed and inferior in the healthy texture in volume—but susceptible, providing the disease has not lasted too long. In inflammation the pulmonary texture is softened; in atelectasis it is hard, and the cut surface is not granular, but smooth. When no complications exist, the anatomical characters of a first or third stage of pneumonia are not discoverable in or near the diseased patch; in short, we have nothing like pneumonia except the solid, non-crepitant mass which is likely to be confounded with the second stage of the disease, namely, with red hepatization. While single pulmonary cells have been dilated in the midst of an undeveloped lobule, the absence of softening, and of the peculiar, congested, humid character of its texture, offers a wide difference between it and the first stage of pneumonia. A portion of the lung retaining its fœtal condition allows a little thin, dark, apparently natural blood to escape upon pressure; in the first degree of pneumonia, a quantity of turbid, bloody fluid, mingled with fibrin, and with a few minute air vesicles; in red hepatization, a tenacious, dirty-brown, reddish; in gray hepatization, a large proportion of grayish-yellow, purulent fluid may be expressed. Atelectasis usually affects both lungs; pneumonia is for the most part, confined to one lung. Finally, the secondary pneumonia attendant upon pneumonia, as inflammation of the pleura and of the bronchial mucous membrane, and softening of the bronchial glands, with fibrous concretions within the cavity of the heart—these are wanting in atelectasis. The peculiar character of this fœtal condition of the lungs is only those marked during the first few weeks after birth; subsequently, when, as already stated, ulterior changes take place, it becomes extremely difficult to form an exact diagnosis from mere *cadaveric* inspection. Atelectasis is frequently confounded with pneumonia by some writers on diseases of children, as their publications amply prove; for we find specified under "infantile pneumonia" so much that is peculiar and enigmatical, so many deviations from the same disease in the adult, as to render it obvious that two maladies of quite dissimilar diseases are brought under the same *rubric.* The accounts given of the appearance after death are, in many instances, conclusive as to the justness of the foregoing assertion; and that without reckoning the previous symptomatic relations, namely, the frequent absence of true inflammatory phenomena, the entire want or irregular accession of fever, and the very slender information derived from percussion and auscultation. This perplexing difficulty has many times induced writers to assume a double form of infantile pneumonia. Rilliet and Barthez distinguish an acute and chronic type: the first occurring in children somewhat advanced; the chronic form, on the other hand, assails, for the most part, new-born infants, and agrees, anatomically, very close with atelectasis. Gerhard has shown that atelectasis chiefly concerns children from birth until the age of one year. "Crusi," who properly rejects the idea of atelectasis being a pneumonia or bronchio-pneumonia, met with inflammation of the lungs in young children very readily. Valleix is perplexed by certain incongruities really belonging to atelectasis. The greatest difficulty is to account for the "hepatization" patches, always hardened, instead of softened, and for their cut surface being smooth instead of granular. In the new-born he never met with these secondary results of pneumonia so constant in the adult. Whatever has been encountered of that nature of others, I am inclined to attribute to some other morbific source.

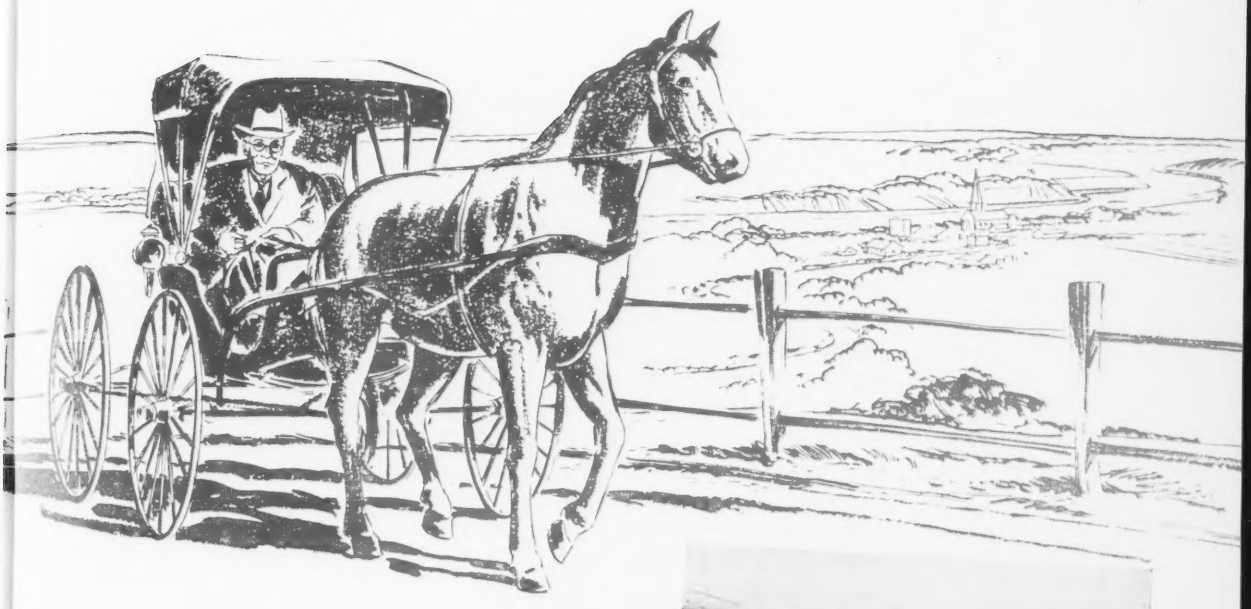
The very manner in which the disease spreads within the lungs is opposed to the course of pneumonia, but, on the other hand, consistent with atelectasis. When death occurs a few days after birth,

it may be possible that infiltration and inflammation commence *"in utero."*

In conclusion, I consider myself entitled to draw the following inferences: new-born infants are prone to organic affection of the lungs, altogether distinct from pneumonia, and dependent upon imperfect inspiration after birth, by many confounded with pneumonia, and by Rilliet and Barthez designated as *carnification.*

The greatest number of cases of pulmonary disease occurring in the earliest period of infantile life, and set down as pneumonia, may be regarded as cases of atelectasis. This assertion may be taken with some reserve. Pneumonia will occasionally prevail as an epidemic with new-born children; under these circumstances pneumonia will obtain a numerical preponderance over atelectasis when pneumonia attacks infants in foundling hospitals. (1879)

1880
"The Doctor Builds His Practice"
1900



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1. State Capitol Building, Topeka. (1888)
2. Illinois emigrants arriving in Butler County. (1890's)
3. The famous Dodge City cowboy band. (1886)
4. Fort Scott, as it appeared in 1886.

Introduction

Kansas is now twenty years old and has a population of nearly a million. The wounds of the Civil War are healed, though the bitter struggle is not forgotten.

Railroads have gone westward and to the south to the point that Kansas has more railroad track than most of the states. Immigration is beginning on a large scale, with Scandinavians, Germans, Russians, Pennsylvania Dutch, and others helping to make another "melting pot." Cowboys have taken possession of Abilene, Dodge City, and other communities as they brought in huge herds of cattle from Texas. Our State Capitol was started in 1866 and will be ready for some occupancy in 1881.

The young state has shown concern for future culture by the establishment of a large number of colleges, a state university, and an agricultural college—the second in the U. S. Several insane asylums are open and have a few patients. Churches are organized in many communities and are thriving.

The buffalo herds will soon be almost exterminated by the ruthless hunting. "Grasshopper invasions" have occurred, and will occur again. Prohibition is soon to become a law of the state (1881).

The Society has passed through the dangerous period of its infancy and begins to stretch, to flex its muscles, and to encounter some "growing pains." Fasteur and Lister have made their monumental and revolutionary contributions in establishing the relationship between bacteria and infection—contributions which will influence so greatly the future of medical practice. Darwin has propounded his theory of evolution.

With this background we see the Kansas physician continue his pioneering as he builds his practice on the sound principles of the day, keeping step with the many advances of the period.

Address of the President

C. C. FURLEY, M.D., Wichita

Coming together at this twenty-first annual convocation of the Kansas Medical Society, I wish to heartily congratulate you upon the long and continued success of our association. We come again to compare notes, with scientific discussion, and to enjoy the friendships and renew the profitable and pleasant acquaintances which probably would not have arisen but for these annual meetings. Our Society, composed as it is entirely of active practitioners of our art, must, by our interchange of views, alike benefit the people and the profession, and at the same time renew the fraternal feeling and cohesion of purpose that must be of service in giving us moral force and influence in all the departments of science and usefulness that properly belong to our profession. I trust that all our deliberations may be conducted in such a way as will conduce to these results.

The advancement of the science of medicine and surgery, to the end that the profession may maintain its prestige of standing in the front rank as the promoters of useful progress, and that the greatest good may be attained for the people of all the earth, is one of the most important objects of this and all kindred associations. Intimately and inseparably connected with it is the duty of throwing around the profession of medicine such safeguards as will protect the people from the evils of quackery, and leave the legitimate field of practice to those who possess the proper professional and moral qualifications. To the latter, the attention of the public, legislatures and courts has of late years been called, and legislation has been had in this State. A short time before our last meeting, a law was passed by the Legislature of this State, governing the practice of medicine, which met with strong opposition, coming chiefly from influences brought to bear by irregular practitioners of medicine, resulting in forcing into the law some matters that could be improved, and of cutting out some that it would have served a better purpose to have kept in.

We have been operating under this law for nearly one year, and while we find in the main it serves the purpose, as a member of this Society I desire to enter my protest against any law creating more than one Board, and which in this State has well-nigh had its object defeated by the cupidity and vileness of one of the Boards created by the law. If this law were properly enforced there ought not, prior to the first of April last, to be found any person in the State practicing medicine, unless duly licensed by one of these Boards, as subsequent to that date the law only recognizes as proper to receive such license, those who have by proper means become possessed of a diploma from a recognized medical college, which is the presumable evidence of the education and scientific training of the holder. The law of the land so protects the financial and property interest of the people, that it will not permit persons to engage in the practice of the law until they shall have passed a competent examination and shown themselves to be of good moral character. It seems more important that the people should be protected from charlatanism in medicine than in law. Let us see that the law we have is properly enforced, and our standing will be advanced.

In the last few weeks an effort has been made to cast a doubt upon the legal existence of the corporate powers of this Society, and an opinion has been procured from a law firm to the effect that the Kansas Medical Society has no legal corporate existence, and had no authority to appoint a Board of Examiners under the law of 1879, and that certificates issued by such Board will not protect the holders of the same from the penalties of the act. This opinion was procured at the instance of the Board, previously mentioned as mercenary, and published at advertisement rates in different papers of the State, as well as in circular form, attached to an advertisement of the "Eclectic Board," calling the attention of the profession in the State to the fact that they, the "Eclectic Board," considered the certificates issued by the Board of Examiners of this Society "invalid in law," and that its Board of Examiners would issue certificates to all who hold certificates from the Board appointed by the Kansas Medical Society, on the payment of five dollars, and, as I understand, in direct violation of the express limitations of the law, which provides that no examination shall be held after the first day of April, 1880.

The written opinion of eminent lawyers has been obtained by the President of the Board of Examiners of the Kansas Medical Society, in which it is unqualifiedly held, that it has a legal corporate existence, and that the certificates issued by its Board of Examiners are legal, and will fully protect the holder.

The whole matter has the look of an unprofessional and unwarrantable attempt to levy blackmail against the members of the regular profession. It is sincerely to be hoped that none will be, and I believe none of the profession have been, gulled by

the trick, and my advice is, that no further notice be taken of the matter.

The sanitary condition of the State is of the greatest importance, and in my judgment this meeting might, with great propriety, take some steps looking to the promotion of this object. A law should be passed by the Legislature of the State, creating a Board of Health for the State, composed of members of the medical profession, chosen with a view to their learning and fitness for the duties to be performed, with one or more lawyers of acknowledged ability, to advise the Board as to all strictly legal questions that may arise in the discharge of their duties. The Board should have power to investigate as to the prevalent general and local causes of disease, as well as those of epidemic and contagious character, and have power to use such means as may be found necessary to prevent the same.

They should especially be required to record correct information of births and deaths, with the causes of the same, which in future years could be referred to as reliable statistical information. They should have authority to take the proper steps to eradicate, as far as possible, the causes of disease, wherever found and of whatever character, and to see that cities and towns, though their local authorities, are kept in proper sanitary condition, making annual reports to the Governor, with such recommendations as they might deem proper. The deathrate of the State, moderate as it is, might thus be materially diminished. I would suggest the propriety of having a committee appointed to take such steps in the matter as may be deemed advisable.

It is important to the profession that it be protected from the blunders of incompetent druggists. At this time an important question is pending before the people of the State, upon the question of temperance reform, which will be voted upon at the November election, and in the event that the proposed constitutional amendment prohibiting the manufacture and sale of intoxicating liquors is adopted, it will in all probability call into existence a large class of druggists whose chief aim will be to evade the letter and spirit of the amendment and all laws passed to carry it into effect, and in whose hands professional prescriptions might be dangerous to the profession and the people. In New York, Illinois and other States, laws have been passed to regulate the sale of drugs and put the business in competent hands, and have been found to serve an excellent purpose.

I therefore recommend that the Society appoint a committee to take into consideration the propriety of presenting to our next Legislature a memorial asking for the enactment of a law regulating the sale of drugs in this State, similar to that of the New York law on the same subject, and also the committee be authorized to take such steps in the matter as may be deemed prudent. (1880)

An Anomalous Bigeminal Pregnancy

GEORGE H. RANDELL, M.D., Easton

On January 25, I was called to attend in labor, Mrs. C. E., colored. Had not seen patient previously. Found a strong, well-built woman, aged about twenty-six years; healthy, and spirits good. Patient gives the following history: Has one child, born two years ago; health has been good during the whole time of gestation; has had no fall or injury of any kind; has been accustomed to ride much in an ordinary farm wagon. Is not and has not been conscious of anything abnormal, except that she thinks she has overrun her time about one month, but of this I can find no evidence, and therefore presume she is mistaken; and that one month ago she experienced what she termed her "turns." This seemed to have been a hemorrhage, small in amount, accompanied with pain, and ceasing spontaneously in two or three days. When I arrived labor-pains had been present twelve or fourteen hours. By digital examination, the os was found well dilated, and the head presenting in the first position. . . . In four hours from my arrival, a well-formed and vigorous female child, weighing about nine pounds, was born. After giving the child the usual care, I made a digital examination with the view to taking care of the placenta. Following up the cord, my fingers came in contact with a hard substance, which proved to be a dead fœtus with the hand presenting. I readily passed my first and second fingers up and around its neck and delivered. This second child was about seven months old, certainly not more than eight; weighed about one-and-a-half pounds; bones of cranium collapsed; body and extremities flabby, and extremities œdematous; decomposing, especially about mouth and nostrils; smell offensive; cord small and flaccid. . . . From the appearance of the dead child, I should be inclined to think it was not more than seven months old; but knowing the difficulty of forming an exact opinion on this head, in the case of a putrefying child, and

taking this uncertainty in connection with the hemorrhage one month before labor, I conclude that probably the hemorrhage marked the time of the fœtal death, or a short time subsequent to it. From this it appears that *a dead child may be carried in utero in company with a living child, without detriment to the latter, for a period of at least one month.* I account for the hemorrhage by regarding it as an abortive attempt of the uterus to empty itself of an offending body, viz., the dead fœtus. (1880)

Report on Anaesthetics

W. W. COCHRANE, M.D., Atchison

Probably the most noted instance of persistent opposition to, and continued denunciation of, a new discovery in medicine has been the heroic warfare waged against anæsthesia. So persistently and arduously have the enemies of progressive medicine expended their talent against this grand achievement of modern therapeusis that they had for thirty years manufactured a skepticism which had retarded its progress, and to a great degree destroyed its practical utility. But they have quietly given up the controversy, acknowledged their failure, and humanity will fervently rejoice, and the practitioner of the future will exult at an accomplishment fraught with so much importance to their success. At the present time there is probably a greater unanimity accorded to the importance of and innocuity of anæsthesia than any other divisional class of therapeutics. The surgeon who would dare to perform an operation of any importance without its use, would find it difficult to ward off disgrace. No report worthy of credence has ever been made of a death from chloroform in obstetrics.

The obstetrician who hesitates to administer it, under any contingency, will inevitably find himself amenable to one of three unpropitious ordeals. He will induce the patient to believe that she has some organic disease, contra-indicating its use; he will incur the imputation that he is timid, and ignorant of its proper mode of administration; or, that he is void of all sympathy for his patient. So generally has it come to be used, that even timid old women have become ashamed to express their fear of it. It is a singular fact that, from the time of its discovery, minor surgical operations have given the greatest mortality, and notwithstanding the regular and rapid increase of its use, the mortality has regularly and rapidly decreased. Statistics show that from 1848 to 1855, there were forty-eight deaths from all anæsthetics; from 1855 to 1862, there were twenty-six deaths; and from 1862 to 1869, there were twenty deaths in all countries. On looking over the *Medical Journal,* I have found but two deaths from this cause recorded for the year 1880. Inasmuch as the journals were wont to publish deaths from chloroform with as much zest as did the daily papers publish murder, we may infer that not many more than these have occurred.

Why this decided decrease in the mortality from this cause, has not been definitely decided. It may possibly be attributed to the combined influence of a purer article used, a better mode of inhalation, and the greater confidence of the subjects.

Anæsthesia may be divided into three classes—artificial, medicinal, natural. Sleep and syncope are of the last, medicinal substances produce the second, and mesmerism analgesia the first. Of the twenty medicinal substances acknowledged to be anæsthetic, but three have been retained for general use; all have been discarded except chloroform, ether, and nitrite of amyle. Ether has been vaunted as harmless, and is used by a few surgeons; chloroform is used almost exclusively in obstetrics and general practice; nitrite of amyle is being spoken of as a limited remedy. Nitrous oxide is used for the purpose of extracting teeth by dentists. Ample thorough clinical facts have been recently given by authority to induce the conclusion that chloroform will, ere long, entirely supersede the use of anodynes, narcotics, nervines, soporifics, sedatives, and anti-spasmodics.

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Recently the subject of mesmerism has been investigated in a more scientific manner than formerly, and from the numerous positive decisions and conclusions on the subject, made by scientists of Germany, France, and America, we may fairly conclude that the opprobrium so long attached to the subject has been removed, and that henceforth the sensible medical man may allude to its use without fear of being considered an enthusiast. At last we are justified in according it a place in medical science as a therapeutic agent.

The fact having been amply verified that profound anæsthesia can be produced without medicine, by manipulation, or from some influence of one person exercised over another person, warrants us in denominating it artificial anæsthesia. Dr. Hammond

says that every man with a will-power can so influence his subject as to produce this anæsthesia. He calls it signosticism. Dr. Beard says it depends upon the susceptibility of the subject, and but few have the power to influence; he calls it hypnotism. There is every reason to believe that the cultivated normal mind, with methodical continued effort, can so influence the abnormal or sick sensitive as to produce, to a greater or less extent, an anæsthetic condition. By experimental study of temperament diathesis and systemic condition, it will ere long be decided definitely who can produce anæsthesia, and who are susceptible of being anæsthetised. When this shall have been decided—the theoretical status matured—practitioners will at once commence experimenting, and will doubtless soon bring this valuable power into practical use.

Analgesia has been recently spoken of as practical. Rapid, forced respiration may produce anæsthesia, whether by oxidation of the blood or by a concentration of the mind on the effort producing a hypnotic condition has not been decided. (1881)

Sanitation of the Sick-Room

JOHN GRASS, M.D., Independence

The subject of Sanitary Science is one which has rapidly grown within the last few years, and one which is claiming the attention it deserves, in proportion as we become acquainted with the causes and preventions of disease. Whatever can cause, or help to cause, discomfort, pain, sickness, death, vice, or crime—and whatever has a tendency to avert, prevent, or diminish such causes—are matters of interest to us as sanitarians. It invites us to so wide a range of thought that its consideration as a whole is impracticable in a paper so brief as this. . . .

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How then can we best guard the sick-room against those sources of infection and contagion which are alike so injurious to the patient and those around him? Every physician should ask himself this question upon entering the sick-room; for what will his efforts in battling against disease avail him if he ignores the source from which it has its origin? Our duties to our patients signify something more than the prescribing of medicines and the application of poultices. We must regard the hygienic surroundings. We must have a proper regard for ventilation, warmth, light, and cleanliness—all at the least possible expenditure of vital power to the patient. First of all these, and without which all the rest you can do is as nothing, is to keep the air your patient breathes as pure as the external air, and at the same time avoid the chilling effects of a draft. Yet what else is so little regarded by those usually in charge of the sick? Even if it is thought of at all, most extraordinary misconceptions are entertained about it. How often are we called to the sick-room when, upon opening the door, the most offensive odors almost stifle us, and yet those in attendance will hasten to close it, for fear the patient will "catch cold." Even in admitting air into the patient's room, few people ever think where the air comes from. It may come from an adjacent room which is as poorly ventilated as the first, or from a hall which is unaired and full of fumes from the cooking; from a sink, a wash-house, a cellar, or, if in the city, from an open sewer; and with this air the patient's room is supposed to be purified—it had better be said poisoned. The question may be asked, when ought windows and doors to be opened? The answer is, when ought they to be closed? Always have plenty of air from without, and that too, from those windows and doors the air comes the freshest and purest. With a proper supply of openings in a room, fresh air is easily secured when your patient is in bed. Avoid a draft of air between two openings, but do not be afraid of open windows. People do not easily take cold in bed. This is a popular fallacy. With proper bed-clothes and hot bottles, if necessary, you can always keep a patient warm in bed, and well ventilate him at the same time. To have the air as pure within as without, it is not necessary to have the room cold, and the condition of the patient and the nature of his ailment must always be taken into consideration in regulating the temperature of the room. To attempt to keep a room warm by keeping it closed, and thus compelling the sick to breathe the poisonous emanations from their own bodies, is a certain way to delay recovery or destroy life.

Another popular fallacy concerning ventilation is the supposed danger from exposure to night air. We will often find a sick-room well opened in the daytime, and carefully closed at night. They do not stop to consider that we can breathe no other air at night but this same dreaded night air. It is only a question of pure night air from without, and foul night air from within, and a proper ventilation is as essential at one time as another. Then, if we are to keep the air within as pure as that from without, it

must not be forgotten that everything in the room which can give off effluvia serves to contaminate the air breathed by the patient. Even in health, persons cannot with impunity repeatedly breathe the air in which they live, on account of the poisonous nature imparted to it by the exhalations from the skin and lungs. In disease, where everything given off from the body is highly noxious and dangerous, not only must there be plenty of ventilation to carry off these poisonous substances, but the secretions from the kidneys and bowels must be instantly removed from the room. Of the poisonous nature of these excreta it would seem unnecessary to speak, were not the proper precautions concerning them so constantly neglected. In typhoid fever, and some other infectious diseases; there is no longer any doubt that the infection can be imparted from the stools of the patient. Then they should not only be removed instantly, but they should be covered over with earth, where there is no danger of contaminating the water supply, and the chamber utensil carefully washed and left to air before it is returned to the room. How often have we found the chamber carefully stowed away under the bed, in order that a stool may be preserved for the doctor's inspection, and then to remove the offensive odor we find them burning paper or a cotton cloth.

Let no one ever depend alone upon fumigations or disinfectants for purifying the air. The offensive substance, not its smell, must be removed. It has been said that most disinfectants are of essential importance in the sick-room. "They make such an abominable smell that we are compelled to open a window and admit the fresh air." But we must remember that no manner of ventilation can freshen and purify the air in a room unless the most scrupulous cleanliness is observed. Dusty carpets, dirty walls, musty curtains and furniture, filthy and poorly-aired bed-clothing will counteract your best efforts at ventilation. For a sick-room, a carpet is perhaps the worst expedient which could by any possibility have been invented. As a repository for catching and retaining the germs of disease, it meets every requirement. A dirty carpet literally infects the room, and when we come to consider the great amount of organic matter which it absorbs from a polluted air, and from the fact of people coming into the room, this is not surprising. A bare floor, well and often cleaned, is preferable in a sick room to the newest, most costly carpet. The walls should be well cleaned, and if of plaster, may be freshened by whitewashing. The furniture should be scanty in the room, so that it may be the more easily dusted and cleaned, and the window curtains should be often changed and aired. A proper care for the bed and bedding of the patient is absolutely indispensable to his well-being and comfort. Without this, the patient will have reintroduced into his system the emanations from himself, which day after day and week after week have saturated his unaired and unchanged bedding. How can it be otherwise? If we consider the amount that an adult person in health exhales from the skin and lungs in twenty-four hours, loaded with poisonous organic matter, and that in sickness the quantity is often greatly increased and is much more noxious, we must know that a large proportion of it is absorbed by the bedding, and there it will remain, unless the bed is properly changed and aired.

The bed and covering should be as light as is consistent with the comfort of the patient, and where it is not utterly impracticable, it should be thoroughly aired every twenty-four hours. . . . This can be best accomplished where you can have two beds at your disposal, and the lifting is done upon a sheet or blanket, which will avoid tiring or exhausting the patient. . . . And this brings us to a consideration of the influence of light upon the sick and enfeebled. The need of light for a patient is only second to a need of fresh air, and after a close room, the next most hurtful thing is a dark room. Of course, in some diseases of the eye, and a few other conditions, light must be forbidden, but whenever this must be continued any length of time, it is always at the expense of the general system. Not only light, but the direct rays of the sun, should pass into the room if possible. While the effect of the sunlight is invigorating and cheering to the patient, directly, it also aids him indirectly, by its purifying effect upon the air. We have all noticed the musty smell given out by a room from which all sunlight has been persistently excluded. If the patient is able to be about the room, great benefit may be experienced by sitting for a while each day where the sunlight will fall directly upon him, and if he is confined to his bed you will find him involuntarily turning his face toward the light, just as a tender house-plant will bend its stem in the same direction.

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It may seem that these matters belong within the province of the nurse rather than the physician, and yet how many of us can testify that in almost every instance a proper sanitation of the sick-room, if left entirely to those in charge, will go undone. Until we can have intelligent nurses, educated for the purpose, we must see to it ourselves that the patient is not poisoned by his own excretions. I have known a number of that school which ignores pathology and delights in high potencies, to gain an enviable reputation by a strict adherence to cleanliness and proper ventilation. It is not because physicians do not know these things that they are not always heeded, but because, in their eagerness to overcome disease, they rely too much on medication alone, and trust

other matters of equally vital importance to the nurse. We cannot afford to stand idly by, waiting for the source of this poisonous stream to go dry. We live in an age peculiarly distinguished by progress, and sanitary science is not far behind in that great advance that is being made all along the line, and the man in our ranks who ignores its teaching had better retire from the field. (1882)

Medical Jurisprudence

HON. J. T. BRADLEY, Topeka

I esteem it a great honor to be invited by the gentlemen composing your Committee of Arrangements to deliver an address before the Kansas Medical Society, upon the subject of Medical Jurisprudence; but that subject is too great for one brief lecture. It is a subject upon which many books have been written; a subject that belongs almost exclusively to your profession. Lawyers do not instruct doctors on medical jurisprudence. Law is a rule of action. Medical law embraces the entire practice of the greatest and deepest of all professions. You have studied the science of surgery and medicine in your colleges, in your books, by actual practice, by hard and sometimes bitter experience. It is a life study. You are called as experts to testify upon the subject, to teach courts and juries what the rule is in certain cases; what such and such symptoms indicate.

Lawyers get a smattering of the science in their colleges. They learn it in actual practice, in criminal cases, in contests of wills, in cases of insanity, in all cases arising out of the relation of the sexes, in questions relating to age, identity, presumption of survivorship, life insurance, and medical testimony.

Physicians are presumed to carefully study the science of medical jurisprudence. Lawyers only study the application of the science to questions arising in courts of law, for medical jurisprudence, as defined by the standard works on that subject, is that science which teaches the application of the practice and principles of medicine to the elucidation and settlement of doubtful questions arising for investigation in courts of law. It consists of a great array of facts gathered from study, from experience. It is a great science, but it admits of no clear, logical arrangement of the topics which comprise it. It is not itself a complete whole, to the production of which all the several parts conspire in a natural order. It consists of many different subjects or topics, mostly isolated, and having with each other few if any intimate connections.

We are not permitted to use any of your standard authorities in the courts. We are not allowed to read those authorities to courts and juries, because they are not written by persons under oath. Our Supreme Court in the famous case of "The State of Kansas *vs.* Baldwin," laid down the rule that medical and scientific books cannot be admitted in evidence to prove the declarations or opinions which they contain; but a witness who is a medical expert is not wholly confined to his personal experience in the treatment of men, but may give his opinions, formed in part from the reading of books prepared by persons of acknowledged ability; and it is not improper for him to give the source of his opinion, and to state that all the writers and authorities on the subject, so far as he knows, support him in that opinion.

That rule seems to be ridiculously technical, that a witness can swear to what he thinks a book tells, but that he can't read from a book. That is the way with most of our law, fine hair-splitting technicalities. There ought to be a postscript at the end of many a rule, saying "Please excuse the reasoning."

Frequently the question is asked by physicians who are called into the courts as witnesses, as experts in difficult cases, if they are not entitled to fees as experts, or in other words, if they can be compelled to testify as to their medical knowledge and experience without some proper compensation, allowance, or fee, more than ordinary witnesses.

The physician in the court room receives no higher compensation than the other witnesses. It is a duty that he owes to society to testify when he is called. It interferes often with his practice, and sometimes seriously discommodes him; but like other witnesses, he is compelled by the law, and for the purpose of determining the truth of a question, to make personal sacrifices.

There is rarely a criminal case tried but what physicians are called in to the trial, and very often their evidence is all-important in deciding a case.

A physician should never take the witness stand in any case without first refreshing his recollection and reëxamining his books. He will find the lawyers on the one side or the other, perhaps on both sides, thoroughly and carefully prepared on that particular case.

Any man—lawyer, judge, or doctor—will sometimes easily become confused by men whose business

it is to confuse; and doctors, like lawyers, will differ, and on matters too that would seem to be settled. In my limited practice I have noticed this often.

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As a rule, you are only called into the court room as experts. Your relations to your patients and what you learn from them as such are strictly confidential. The law protects you and it protects them. No physician or surgeon can testify concerning any communication made to him by his patient with reference to any physical or supposed physical disease, or any knowledge obtained by a personal examination of any such patient.

A physician is in law an expert as to all matters embraced within the range of his profession. It is not necessary that they should be graduates of any medical college, or have a license to practice from any medical boards, in order to render them competent to testify as experts in relation to matters connected with their profession. If it is shown that the witness is a practicing physician or surgeon, it is sufficient evidence that he is competent to express an opinion on a medical question. He need not be a specialist; he is supposed to understand all about his profession, just as a lawyer is presumed to know the law—although it is sometimes a very violent presumption. But if he is a specialist, if he has devoted himself exclusively to one branch of his profession and has had no practical experience in that subject-matter to which he is called to testify; as, if an oculist is called to testify as an expert in insanity, his testimony would be inadmissible. And yet the general practitioner might have no experience whatever in cases of insanity.

It needs frankness on the witness stand. If a witness does not understand a subject he had better frankly admit it. It does not hurt him with thinking men. A quack will sometimes easily get punctured by a pettifogger, and a pettifogger by a quack; and the educated people of to-day are not easily humbugged. They can see through a disguise.

Human testimony, the best of it, is like humanity —weak and unreliable. There is constant room for improvement, for advancement in every walk of life.

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I will now briefly call your attention to the condition of the statute laws of Kansas on the practice of medicine, or rather to the absence of any such laws.

You have a law passed by the legislature of 1885, creating a State Board of Health, of nine physicians. No compensation of any kind is provided. That board can make recommendations as to the condition of public buildings, can register marriages, births and deaths, but can't regulate medical practice. It is wholly ornamental, and nothing useful about it. The only law you have relating to the practice of medicine consists of two little sections in the laws of 1870. It merely provides that any person who has attended two full courses of instruction and graduated in some respectable school of medicine, either in the United States or some foreign country, or any person who can produce a certificate of qualification from some State or county medical society, and is of good moral character, can practice medicine. Also that persons who have practiced for ten years continuously without any certificate may continue to practice, and those who have practiced five years continuously are allowed two years in which to get a certificate.

This is not regulating the practice of medicine. There is no authority here to examine anyone or to test the qualifications of anyone; a certificate from any State or county medical society, a diploma from some cheap and worthless school.

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You have endeavored earnestly to secure appropriate legislation governing and regulating the practice of medicine and surgery in Kansas, and by forming an alliance with the Eclectic and Homeopathic Societies, you succeeded in 1879 in obtaining the passage of a law governing the practice of medicine in Kansas; but it was not very carefully drafted, and was, for technical reasons, declared by the Supreme Court to be unconstitutional.

It could be reënacted with a few changes to adapt it to our constitution, and would then be a very useful and beneficial law. That act was in substance as follows:

It created three boards of medical examiners, each board to be elected annually, one board to be elected by the Kansas Medical Society, one board by the Eclectic Medical Society of Kansas, and one board by the Homeopathic State Medical Society. Each board to consist of seven members. No person could practice medicine or surgery in Kansas without having a certificate from one or the other of these boards. Three ways were provided to secure such certificate:

1. To present a diploma from some medical institute, and to prove by the affidavit of the applicant that he was the lawful possessor of the diploma; that he was the person named therein; that the diploma was obtained in the regular course of medical instruction, and without fraud or misrepresentation of any kind, and that the medical institution granting the diploma had at the time of granting the same a full corps of medical instructors, and was at the time a legally incorporated medical institution, actually and in good faith engaged in the business of

medical education, and in good standing as a medical institution, and that the applicant had complied with all the requirements of such institution. The board had authority to take such further testimony as it might deem proper as to the identity of the person named in the diploma, and as to the manner in which it was obtained, and if it appeared that any fact stated in the affidavit was false, the application for a certificate was to be rejected. No board could entertain an application which had been rejected by either of the other boards, and no rejected application could be renewed until one year after such rejection.

2. Persons who had been practicing medicine continuously in Kansas for five years prior to the passage of the act, were to receive certificates upon proof of such continuous practice.

3. Each board could examine persons not licentiates or graduates, and issue certificates to and admit such persons to practice.

A $5 fee was charged for each application, and a fine of $20 was assessed for presenting a fraudulent certificate, and a fine of from $50 to $500 and imprisonment from thirty days to one year was the penalty for practicing without such certificate.

Filing the certificate or diploma of another, or making a false affidavit, was a felony.

Lists were sent to every county clerk in the State, of persons receiving certificates.

Each physician was to record his certificate in the office of the county clerk in the county where the physician resided.

Each of the three medical societies mentioned in the act of 1879 appointed an examining board, and they commenced operations under the act. Mr. Willard Davis (now deceased) was Attorney General at that time, and he commenced an action of *quo warranto* against the Kansas Medical Society, to test its power, and also to test the constitutionality of the act of 1879. It was claimed by the State in that action that the *charter* of this Society, having been granted by the Territorial Legislature, had expired when the Territory became a State. That it was void because it was perpetual and forever, because there was no time fixed when it should expire. It was also claimed by the State, that the act of 1879 providing for the creation of the Boards of Medical Examiners was unconstitutional; that it was in conflict with section 1 of article 12 of the State constitution, which declares that the Legislature shall pass no special act conferring corporate powers.

The opinion of the Supreme Court was delivered by Chief Justice Horton. He declared the first point was not well taken. He held that the Kansas Medical Society was a live institution; that it was perpetual and immortal, so far as the law could create immortality. But he held that this act of 1879 was unconstitutional; that it conferred special corporate powers on three societies and no others, and was therefore invalid. The court clearly decided in that case that the State had the power to provide for boards authorized to examine persons seeking to be admitted to practice medicine; and that the act would not be invalid if confined to persons, societies, or associations not incorporated.

We have no law in Kansas governing the practice of medicine. There is nothing to prevent or punish quackery or fraud. The science of medicine is the greatest, deepest, most abstruse, complicated and difficult upon the face of the earth. Although as ancient as the oldest of the arts, it is only of late years that you have called the practice of medicine a science. Surgery has long been a complete and perfect science. In medicine and all that appertains to it there have been wonderful developments within a hundred years. And it affects the whole people. It concerns the health, the happiness, the reasoning powers, the lives of all. The physician's office is a more sacred office than that of any priest, no matter how white-robed he may be, or how holy the altar at which he practices.

. . . . .

. . . It is true that no law will or can make a physician; that requires mind fitness, nerve, thought, sleepless, untiring work. The physician makes himself, but a law could be enacted that would require a thorough course of study, careful preparation and rigid examination, necessitating a certain fitness before permitting the person to practice.

In England a statute gives the body of medical practitioners powers of self-government so far as regards qualifications and training. All duly qualified persons are now registered, and the register is published. Those who are not registered cannot fill certain offices, and cannot sue for their fees. Before this law was passed, physicians could not sue for their fees; they were on the same footing as barristers formerly, the fees being considered as merely honorary, which ought to be paid beforehand, and at all events were not considered a legal debt. This act also punishes quacks by giving power to justices of the peace to punish with fine or imprisonment those who falsely pretend to be or take or use the name of physician or surgeon of any kind or character.

The English statute would be infinitely preferable to no law at all. It would be an easy matter for you to secure reasonable, necessary and appropriate legislation at the next session of the Legislature. The people of the State have confidence in the physicians, they are interested with you in the passage

of a wise law on this subject. Only quacks would oppose such a law.

I said the people had confidence in you. Why, only the other day a carpenter in one of our villages was making a coffin; a friend came along and asked who was dead. The carpenter replied that no one was dead—that he was making the coffin for Mr. Williams. "Why," said the friend, "Williams isn't dead." "No," said the carpenter, "he ain't yet, but the doctors says he will be dead inside of twenty-four hours, and I reckon old Dr. Kellogg knows what kind of medicine he give him." (1888)

Alopecia Prematura

T. J. MILLER, M.D., Cambridge, Ohio

That we are fast becoming a nation of bald-heads, has been asserted by various writers. And that it is more than a mere assertion is probably true, for we have all noticed a greater preponderance of shining pates in an assembly of a certain size *now,* than was to be seen in a corresponding assembly twenty-five years ago. It is not my purpose to consider cases where the loss of hair follows a fever, is due to eczema or syphilis, but only those cases occurring in young persons independently of any specially diseased condition.

I will first answer briefly some of the arguments advanced in support of certain theories that are claimed to be the cause of premature baldness. One writer asserts that mothers are too particular and cleanly, washing the scalp too often, thereby removing the oily secretion that is necessary to nourish the hair, keep it in a healthy condition and maintain its vitality. If this scrupulous cleanliness of the scalp in children is the cause of baldness, then it would necessarily follow that about the same number of either sex would lose their hair; but on the contrary, this misfortune is confined to the male members of the human family. If this was the correct solution, we should show pronounced loss of hair while small children when our heads are subjected to the scrubbing process every day. Unfortunately for the argument, our scalps retain a bountiful supply of nature's covering while we are young, and this loss does not become apparent until we have grown to manhood and daily shampooing is not indulged in by the majority of persons. The beard would also fall out if daily washing with soap and water produced death of the bulb, for there are many men who are shaved every day and the oily secretions completely removed, yet each individual hair retains a good vitality even to old age, and no difference can be seen between the one who shaves every day and the one who never shaves at all.

Another one asserts that not enough washing is done and the scalp is allowed to become filthy, thus causing a loss of hair. Now the same arguments that were used to prove the falsity of too great cleanliness, will serve to prove the falsity of this, also; for instance, children who grow up together and are subject to the same sanitary conditions, the females will retain a luxuriant growth of hair and many of the males become bald; and as only a minority of the males lose their hair, and were filthy alike, hence we must look for another and a better reason. If a dirty scalp is the cause of this loss, then the Indians would go without scalp-locks, and that, too, independent of a foe's scalping-knife. Some say that long and some that short hair is the cause of baldness—two very opposite conditions; but as both will be referred to again, we pass them at present. Another claims that it is constitutional with dyspepsia for the principal cause, and constipated bowels, nervousness, a dirty scalp, wearing night-caps, etc., as adjuncts. I answer this statement by simply asking, why don't women, then, become bald?

I think Fox claims that in women there is a greater amount of adipose between the scalp and skull, acting as a cushion to protect the hair bulbs, while in men this fat is absent, and the scalp draws so tightly to the bone that the pressure causes death of the bulb. There being more fat between the scalp and skull of women than in men, may be an anatomical fact, although I never saw any difference; and then if this was the right theory, we would expect men in all countries and under all circumstances to lose their hair. If I am not mistaken, alopecia prematura is confined to countries where hats are worn and the hair cut short. No Indians become bald (unless scalped), neither do the inhabitants of Asia and Africa, and I believe all those who wear turbans retain a good growth of hair. The most commonly accepted theory is, that the scalp becomes overheated from wearing tight hats, and by reason of this heat the hair-bulbs lose their vitality, die, and the hair falls out; and

when once dead nothing can restore them to life. This is probably the most difficult to answer of all the assigned causes mentioned in this paper. We do not believe this to be the cause, for if it was, we would expect nearly all persons under similar circumstances to become bald; but this is not true, for only a portion of those who wear tight hats lose their hair. Persons who wear open hats in summer and ventilated hats in winter become victims of this misfortune, while others who winter and summer wear warm, unventilated hats, retain a good growth of hair.

It is true that the hair only falls out beneath the hat, and is the great argument in favor of this theory, but if you will examine those heads critically, you will find that in some persons baldness appears over the occiput, while in others the bregma only is denuded, yet both parts are subjected to the same degree of heat. And more than this, every one as soon as he feels his head becoming too hot, automatically, so to speak, raises his head-cover to allow a free circulation of air beneath his hat or cap. The scalp is kept cool by perspiration and radiation just like other parts of the body; and if this were not true, doctors would be kept busy administering to the needs of persons suffering from attacks of sunstroke, heat exhaustion, cerebral congestion, meningitis, mania, and perhaps many other troubles caused by wearing warm, tight-fitting hats. The feet are subjected to greater degrees of heat than the head can possibly be, being incased in a woolen or cotton covering and then a layer of heavy leather, often extending to the knee, and that too in the very hottest weather of summer; yet the hair on the feet and toes never drops out, but retains vitality as long as the person lives. If it is the close and warm covering that causes this loss, would not our feet and toes at an early age lose every vestige of their scanty hirsuteness? We hold an entirely different view from any of those mentioned, that we will describe in as brief a manner as possible. In order to keep any part of the body in a healthy state, that part must receive blood of a proper quantity and quality and have a sufficient nerve supply. The blood may be of good quality and of sufficient quantity to nourish a part, yet if the return of venous blood be hindered, passive congestion results, with lowering of the vitality and diminished nourishment. If pressure is made on an artery diminishing the caliber of vessel, less than the usual amount of blood reaches the part supplied by that particular artery, diminishing nutrition, lowering vitality, and the tissues atrophy from inanition. Or the same result may be brought about by a passive congestion due to an obstructed vein, and the part, from lack of red blood, sinks to a condition far below that of a healthy state. And if the lumen of a vessel be only partially destroyed, enough blood may reach the tissues to enable them to live, but when they have a special function to perform, a lack of nutrition will cause them to cease functionating, yet are well enough fed to retain life. The special function of the hair bulb is to furnish a starting-point for the hair, nourish it and cause it to grow, but as soon as you cut off or lessen its supply of food, the first to suffer is the hair itself, and if nutrition is further hindered the bulb will atrophy although the scalp may receive blood enough to continue it in a fairly healthy condition.

The scalp is nourished by the two occipital and two temporal arteries, the latter dividing into the anterior and posterior temporal. The bregmatic portion is supplied by the anterior temporals, and the posterior temporals and occipitals supply the remainder of the scalp. If a branch of an artery supplying the scalp is wounded, bleeding is easily controlled by pressure applied to the proximal end of the vessel, and moderate compression only is necessary because of the underlying plate of bone. If the flow of blood in a wounded artery is so easily stopped, the lumen in an unwounded one would be as easily occluded. Pressure is produced by the hat being drawn tightly down on the head, and by forcing the blood vessel against the outer table of the skull, diminishing its caliber at the point where the hat comes in contact with it, cuts off the flow of arterial blood to the scalp. If the hat was worn continuously, the hair would drop out much sooner, and also endanger the life of the scalp, but as the pressure is removed at short intervals it takes a long time to cause atrophy of the bulb; but every time this nutrient is diminished for awhile, it grows a little weaker, until finally the mischief is done, atrophy has taken place, and the hairy covering of the scalp disappears. The pressure of the hat may also interfere with the return of venous blood, producing a passive congestion and thus prevent the flow of arterial blood through the capillaries, and by so doing impoverish the scalp and all that pertains to it, even though the arteries may not be greatly compressed. The hat, acting as a tourniquet on the arteries supplying the scalp, is the great immediate cause of premature baldness, but there are other things that play an important role as remote or predisposing causes. Persons who have a large bi-parietal are more likely to become bald than those who have a small bi-parietal diameter of the head. It is the full side head that so easily allows compression of the anterior and posterior temporal arteries. One who has a flat side head may never lose his hair, simply because the hat presses lightly or not at all on the vessels supplying

the entire top of the head, and the occipital branches feed but a small part of the scalp above the point where the hat usually comes in contact with the skin. The stiff, inelastic hat is a great factor as a cause, especially when worn by one who has a full side head, for it will not adapt itself to the outline of the skull, and most likely will make great pressure on the posterior temporal artery; and as that vessel supplies a great area on the top and back part of the head, you will nearly always find that the hair first disappears on that region. The custom of having the hair cut close to the scalp deprives the blood vessel of the protection that a heavy growth of elastic hair would afford, and more easily allows the hat to produce compression; hence we say that short hair is a potent factor in the production of baldness. It is thought that mental work has something to do with producing a loss of this growth, but if it did, women would also become bald; but they do not, so this cannot be the cause. Persons will also become bald who are of unsound mind, provided they wear stiff hats and have a round and full side head. Farmers are not so subject to this calamity as professional men and residents of cities, because the farmers usually wear soft hats, while the stiff and especially the silk hat, is worn by the latter. As we have already stated that long hair affords protection to the arteries, hence we argue that as an aid to prevent the scalp from losing nature's covering, we should avoid having shaved and shingled heads. As a prophylactic measure we should wear thin, soft, light hats, and not draw them tightly to the head; and they adjust themselves more perfectly, making equitable pressure, and do not fit closely at a few points. Stiff and silk hats should be made strictly according to measure, and so constructed that they will pass over the arteries without causing more than a slight compression. In selecting a hat from a ready-made stock, choose one that binds only on the anterior and posterior parts of the head, and one that fits loosely over the location of the arteries supplying the top of the scalp; that is, protect the anterior and posterior branches of the temporal.

The temporal arteries are the principal ones to protect, for the occipital vessels supply such a small area above where the hat comes in contact with the head, that they need scarcely be considered. In fact, we believe that both men and women compress more or less the terminal branches of the occipital arteries. It has become quite fashionable in late years among the younger and unmarried women to have their hair cut short, and we believe that all that is necessary to make women bald is for them to shingle their hair and wear stiff hats; and we will venture the assertion that glistening scalps among women in the course of time (unless they wear wigs) will be no novelty. Many other arguments might be adduced, but we have said enough to show our position on the cause and treatment of alopecia prematura. (1888)

Legal Injustice to the Insane

B. D. EASTMAN, M.D., Topeka

The proposition that an insane person is a sick person, requires no demonstration to this audience. Medical men universally recognize the fact that insanity is a symptom of physical disorder. Such disorder may be easily discernible or it may be so obscure as to baffle demonstration. It may be so general and violent as to involve and overthrow all the vital processes, or it may be so limited and special as not to interfere with the ordinary physical processes or functions.

It is due to the insane that they should have speedy and competent medical treatment, to the end that the powers, both of body and mind may be conserved and restored to healthy action.

The diagnosis of insanity and the proper treatment of mental disorder is a purely medical question. Insanity differs from the ordinary run of bodily diseases, in that the highest mental powers are so deranged and perturbed as to render it exceedingly difficult of satisfactory treatment by the general practitioner in the ordinary home. For this reason it becomes the proper function of the State to provide suitable institutions for the treatment of this disease. Inasmuch, moreover, as the patient's liberty must be curtailed, it is proper that the sending of such patients to the institutions provided for their care, should be controlled by due process of law. It is alike unfortunate and unnecessary however, that the legal steps for the control of the insane, savor so much of criminal procedure. Indeed, the laws as they now exist in this state, work great legal *injustice* to the insane, for the reason that the whole procedure of commitment is tainted with the methods of the criminal courts.

The treatment of the insane is thus made to appear like a penalty for crime, instead of a cure for sickness.

The first English statute providing for special arrest and custody of the insane was enacted in 1744, almost a century and a half ago and was entitled, "An act for apprehending and punishing of disorderly persons," and reads as follows:

"Whereas, there are sometimes persons who, by lunacy or otherwise, are furiously mad, or are so far disordered in their sense that they may be dangerous to be permitted to go abroad; therefore, be it enacted that it shall and may be lawful for any two or more justices of the peace to cause to be apprehended and kept safely locked up in some secure place, and if such justices shall find it necessary, to be there chained, if the last place of legal settlement be in such city, or in any town within such county."

. . . . .

Since that time insanity has come to be better understood. Institutions have been provided for the humane and enlightened curative treatment of those affected with this disorder. In the mother country and in many of our own states the laws relating to the commitment of the insane have been modified and improved. In some of the states it is now well recognized that physicians are the proper persons to decide upon the question of insanity, and that this can be done by medical men more understandingly and skillfully and with less violence to the feelings of the insane and their friends than by any legal tribunal. In our own state however, our laws are sadly behind the times and deprive the unfortunate victims of mental disorder, of that consideration to which they are rightfully entitled. The method of procedure in our state is by action before the Probate Court. The steps in short, are, the filing of information in writing before the Probate Judge charging a party with insanity. The Judge fixes a day for trial and impanels a jury. The person alleged to be insane has a right to be present at the trial; to have counsel and to challenge jurors. Witnesses are summoned and a judicial farce enacted. And this to determine whether a person be sick or not. Fancy a court summoning a jury to decide whether a patient has consumption or dysentery or appendicitis or smallpox or cholera. The utter absurdity of this condition of affairs is apparent.

Very frequently in carrying out this procedure, the person alleged to be insane is arrested by the sheriff and held in his custody before and during the trial. If adjudged insane this sick person is very commonly consigned to the county jail pending the application for admission to the asylum. It may be claimed, indeed it is claimed, by lawyers, that this procedure is necessary to protect the rights of the insane, but to be consistent they should require the same judicial investigation before the physician is authorized to administer a dose of paregoric or the surgeon to open an abscess. The impression made upon the insane by this procedure is that they have been subjected to criminal proceedings. Patients continually talk of having been tried and sentenced to the asylum, and ask for how long a time they were "sent up."

An incidental but very important objection to this method, is that it renders it impossible to move in case of insanity until the disease has become so far advanced as to be apparent to the ordinary layman. Cases of violent acute mania are self evident from the beginning but cases of delusional insanity and of melancholia are oftentimes incapable of demonstration to laymen in early stages. . . .

Efforts have repeatedly been made by the Superintendents of the State Asylums and by the Board of State Charities, to have the laws touching insanity, modified, but so far, without success. The essential elements in a satisfactory law regarding insanity, are that the question of insanity should be decided by competent medical men, and that the courts should perform only notarial functions, by certifying to the genuineness of the papers and the standing of the physicians. Indeed, some method should be adopted by which incompetent physicians should be forbidden to certify to the insanity of any person. Certifying physicians should either be qualified by action of court to act generally in such cases or they should be specially selected by the court as occasion requires. They should visit the patient at his home and after due examination, submit their report to the Judge, who should then act upon it. The patient himself should not be removed from his home until he is taken to the asylum, unless it be a case of such violence as to render his removal necessary, and when taken to the asylum, it should be by his friends or his physician, instead of by the sheriff or his deputy.

It is unnecessary at this time to quote the laws of the different states or even to lay before you the text of such a law as would be desirable for our own state. In conclusion however, I submit that our present law works an injustice to the insane; that the diagnosis of insanity and the selection of the best place and method of treating this disease are medical questions which ought to be considered and decided by medical men with only such judicial supervision as will guard against fraud and error; and that the whole proceedings in case of insanity, including the removal to the asylum should be upon the basis that the insane person is a sick person who is to be taken to the hospital for the treatment of his malady. (1893)

Difficulties Encountered in Abdominal and Pelvic Surgery—How to Overcome Them

A. H. CORDIER, M.D., Kansas City

The reports in our medical journals of the vast number of successful cases of abdominal and pelvic surgery, by skilled and experienced operators, have been the means of producing much harm and causing the death of many patients. The difficulties encountered in performing this class of surgery are too often underestimated and the danger too little dwelt upon by writers.

It seems simple and easy to many to do this class of surgery. This opinion is often engendered by a want of acquaintanceship with the technique necessary to insure success, and by the absence of practical experience, gained only by prolonged, painstaking, personal work, or learned at the operating-table of a master of this special branch of surgery. The surgery of the abdomen and pelvis demands special precautions in its performance to obtain the best results and to insure the lowest rate of mortality.

An improperly introduced stitch may lead to dangerous complications, or even death.

My object in writing this paper is to lay stress upon the dangers attending intra-peritoneal operations, owing to the frequency with which unlooked-for and dangerous complications arise during the operation and accidents liable to occur during convalescence. The qualifications of the abdominal surgeon should be such as to fit him to quickly devise safe methods to meet any unlooked-for complications. He may start out to remove an ovarian cystoma, and finish with a ligature around the vessels leading to the kidney, and hold in his hands a large sarcomatous kidney as the pathological specimen. He may start out to remove the vermiform appendix and finish with the gall bladder stitched in the parietal wound. These are errors in diagnosis, it is true, but the same mistakes have been made by the greatest men living. It is the uncertainties and surprises that make the abdominal surgeon constantly on the alert for "stumbling blocks." It is these obstacles and knowing how to overcome them at a moment's notice that make abdominal surgery a specialty. The surgical literature and field is too large to be all grasped at once. . . .

To insure the greatest success in abdominal surgery, the operator should have a good assistant and an experienced anesthetizer.

One of the greatest dangers (and at the same time obstacles) the abdominal surgeon meets is dirt; yet it is one to be overcome if proper precautions are strictly and intelligently carried out. A great surgeon has truly said: "Cleanliness is our most expensive luxury." It costs money and time to be surgically clean, but it is a wise expenditure of the former and an intelligent use of the latter.

It is not the dirt or microbes floating in the atmosphere that we have to combat. Some surgeons, laboring under this delusion, try to purify the air before it enters the operating-room, while they at the same time continue operating with enough dirt under the finger-nails to make a brick. Cleanliness is the keynote to use as a successful prophylactic to infection and peritonitis in abdominal surgery.

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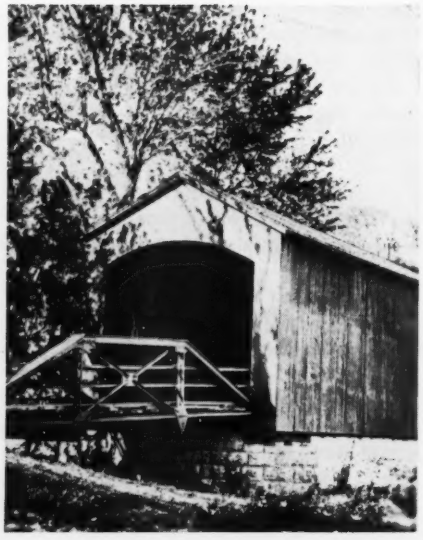
"Chronic surgery" with indecisive action will be an expensive expenditure of time and bring bad results.

The omentum is often found adherent to the wall of an intestine, this portion of the gut getting the greater part of its blood supply from the vessels in the omentum. Here great care should be exercised in ligating the adhesions, for fear of cutting off too much of the intestinal blood supply and producing a gangrenous condition of the gut at the site of the adhesion. A small intestinal diverticulum may be prolonged into an omental or other adhesion and get included in the ligature—a fatal complication if not recognized at the time of the operation. The apposed mucous membranes will not unite.

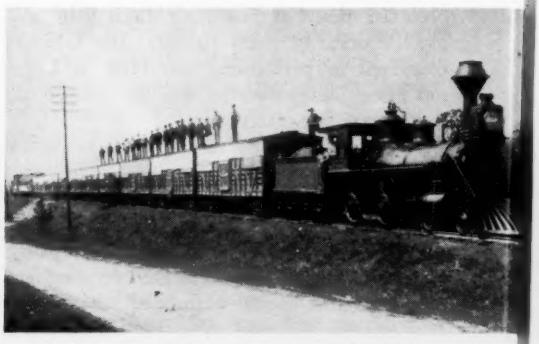
Where large omental adhesions have been ligated during the performance of an abdominal operation the stump may become infected, either during the operation or from the use of impure ligatures. This, occurring after an operation, may be taken for a fecal impaction; if occurring early, an imprisoned collection of extravasated blood may be suspected. This condition is attended with a rise of temperature, vomiting, local pain, tenderness, and firm, hard, immovable induration. *Use nothing but pure ligatures.* If this condition has developed, treat it as you would a localized pus collection in any other part of the body—incision and drainage. This mass will be found attached to the parietal walls in most instances, and can be easily and safely opened and drained. Fecal accumulation should not be allowed to occur after an abdominal operation. When they do occur, they are usually found in the sigmoid or rectum, and are easily removed.

In removing or "hulling out" an ovarian abscess containing a large collection of pus, the sac is often

In The Era Of "The Elegant Eighties"



Covered bridge at Springdale, over Stranger Creek.



First livestock train on Rock Island R.R., Caldwell to Chicago, 1887.

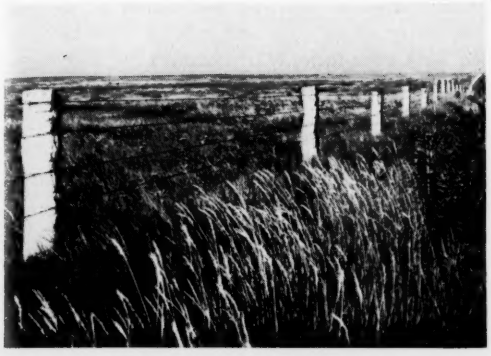
K. U. Basketball team, 1898-99. Dr. James Naismith, far right, back row.

Trail herd enroute from New Mexico to Sterling, 1890's.

Front Street, Dodge City, 1880's.

Emp

—And The Decade Of "The Gay Nineties"



Stone fence posts, Ness County.

Rock Island train waiting for the opening of The Cherokee Strip, 1893.

Bicycle club at Dodge City, 1892.

Croquet game, Clay Center, 1890's.

Emporia baseball team, champions of Kansas, 1894.

ruptured and its contents spilt into the peritoneal cavity. This is an unfortunate accident, and calls for large quantities of hot sterilized water, used with the irrigator, followed by the intelligent use of the drainage-tube. This same rule applies to all liquids escaping from cysts within the peritoneum. The most harmless looking fluid may be laden with the most virulent poison and quickly kill the patient from sepsis or a diffused peritonitis, if the peritoneum is not left clean and dry. *When in doubt, drain.*

A ureter may be divided while doing a vaginal hysterectomy, or even while removing large abdominal growths. If this accident has occurred, an effort should be made to approximate the divided ends by fine silk sutures, or the distal end of the proximal piece may be turned into the bladder, as has been done a few times successfully.

. . . Many deaths reported as due to shock are fatal concealed hemorrhages. If you anticipate a hemorrhage after an operation, introduce a drainage-tube and watch closely for the first twelve hours; if no bleeding has taken place at the end of twenty-four hours, remove the tube. If a hemorrhage is going on, as indicated by the blood in the tube, keep the pelvis dry by frequent aspiration with the long-nozzle piston syringe through the tube. The dryer the pelvis is left after an abdominal operation, the less likely you are to have bleeding. If the aspiration of the tube does not stop the hemorrhage and the patient shows indications of profound anemia, cut the stitches while the patient is anesthetized and seek the source of the bleeding under strict antiseptic precautions. . . .

In removing suppurating dermoids or ovarian abscesses the cysts will often unavoidably be ruptured and their virulent contents in part be emptied into the abdomen. Many "pus patients" seem to have acquired an immunity or tolerance of septic material, and will often get along nicely after an operation in which pus has escaped into the peritoneum, even when it is impossible to cleanse every particle of septic material from the cavity. Large hot-water flushing with sterilized water and a drainage-tube will save the majority of these cases.

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Every abdominal case is an individual one. Of course certain general rules are applicable to most cases. Painstaking care should be exercised in examining every case. If the surgeon assumes the responsibility (he should) for his surgical work, he must certainly arrive at his own conclusions as to what is necessary to be done and how it shall be performed. In a great majority of instances the diagnosis made by the general practitioner is a correct one, but a recognition of this fact should not deter the consulting surgeon from making a most critical survey of the case before resorting to operative procedure.

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Deductions

1. Abdominal surgery is a special class of surgery.
2. The difficulties encountered in doing this class of surgery are many and hazardous.
3. In the majority of instances, with proper precautions, careful and painstaking endeavors, these may be safely overcome.
4. Where it is possible, a positive diagnosis should be made; yet, in doubtful cases, operate if symptoms indicate the necessity for operative procedure, but be prepared to meet any unlooked-for complication.
5. Accidental wounds of the intestines, bladder and other viscera essential to life must be properly repaired, to insure a successful termination of the case.
6. No rough, unsurgical manipulation of healthy organs should be indulged in.
7. Healthful surroundings, a clean patient, clean instruments, clean nurses and assistants, with a skilled, surgically pure surgeon are essentials to a low rate of mortality and complete recovery in abdominal operations.
8. The aseptic treatment of abdominal wounds made by the surgeon should begin in the laundry. Towels, aprons and dressings are too often responsible for the death of a patient. (1893)

From the Proceedings, 1895

Dr. W. B. Mead offered the following resolution which was unanimously adopted:

Resolved, That it is the sense of the Kansas Medical Society in regular session assembled, that a National Health Department be created with the power and dignity of a Cabinet Officer; that the safety and health of the people is of supreme importance, and the establishment of such a department is demanded by nineteenth century progress.

Gynecology and Obstetrics—Chairman's Address

J. W. FELTY, M.D., Abilene

The progress in gynecology during the past year has been in perfect harmony with its previously attained record. You have listened to carefully prepared résumés from year to year, and, if you will pardon an apparent digression from this custom, I shall reverse the order of tactics, and, instead of pointing out what great things this section has done, I believe it equally important to know what great things it did not accomplish, or what mistakes we have made.

There is an inherent weakness in human nature that makes us more prone to account for our successes than our failure, and the results of our work thereby become only an incomplete guide to future generations. Medical journals are teeming with brilliant results; the tyros in gynecology are vying with each other for records; the abdominal surgeon is counting his sections by the score, and the general practitioner is looking upon the results with awe, and inquires whether he had not lost the opportunity of his life by not making ovariotomies and performing hysterectomies.

There is an operative fever in gynecology which has been more or less epidemic in this country, and I believe, like all fevers, it has had a purifying influence—an awakening influence, both to the profession and the public in general. Nor would I endeavor, in the least, to stop the good work, but I would like to see a united effort to hear of the failures as well as successes. In looking over gynecological literature in medical journals, one would surmise that the mortality is *nil*. County, district, State, and even national associations show little in their proceedings except the uniform successes, and particularly is that true in the gynecological work. Those of us who have done any abdominal work know that there is a mortality even among the most expert, and among the novices the mortality increases in a frightful ratio as the skill decreases. What a picture the other side—the failure side—will produce, and it requires as close a study as the successful side! Every member enlisted in this section would be at hand to hear a paper read on "The Errors I Have Made in My Gynecological and Obstetrical Work."

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In a recent article by Goodell, he says: "In the treatment of the diseases of women at the present time there seems to me to be a tendency to lay too much stress upon lesions of the reproductive organs. Too little heed is, therefore, given to the nerve element of women's diseases, and, as a natural sequence, the surgical feelers and antennæ of the medical profession, always too keenly sensitive, vibrate vehemently at the approach of an ailing woman. This trend of the profession, to appeal to the knife as the great panacea for woman's diseases, is seen everywhere. It prevails alike in city, town, village and hamlet. It asserts itself in every medical discussion, and stands out in bold relief upon the pages of every medical journal. It has caused many needless sexual mutilations and unnecessary operations, and it is, in my opinion, the great medical error of the day." . . . There are, I am certain, in all our State insane asylums, women who have been incarcerated for incurable madness who are carrying pools of pus in their pelves. I make this statement with very little fear of contradiction, for it has been repeatedly demonstrated wherever it has been properly investigated. . . .

In a paper read before this section at Fort Scott, two years ago, I then alluded to a patient upon whom I had operated for lacerated perineum and cervix to remove a long train of nervous symptoms and much physical pain referable to the reproductive organs. I must quote from this article to further illustrate the point in question. This patient was first operated upon for lacerated perineum and cervix. Getting no better, she went to Chicago to a specialist, who again repaired the perineum and amputated the cervix. But her nervous symptoms remained the same. He operated on her for hemorrhoids and removed the coccyx. But her nervous symptoms remained unchanged. But the end is not yet. The orificial surgeon, the harbinger of peace and rest, announces with triumphant victory the panacea for all woman's ills, and he finds a cicatrix in the stump of an amputated cervix and a sphincter ani muscle which must be dilated. But even now she does not "sleep the sleep that knows no waking," but she still retains the same nervous phenomena, only much aggravated by much useless, poor and bungling surgery, and a victim of misplaced confidence. She has since become an opium fiend—a glowing monument to our modern gynecology!

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It behooves me at this point to give my respects to a much abused instrument in the hands of the general practitioner—I mean the uterine dilator. This instrument should not be in the hands of any practitioner who is unable to make a proper diagnosis, for in cases of latent intra-pelvic inflammation or ad-

hesions it becomes an instrument of torture and great destruction. It has absolutely no use in cases with a previous history of pelvic inflammation. The full value of the remarks on this point will hardly be fully appreciated except by those who have been called to the bedside of women who suffer from attacks of peritonitis from leaking pus-tubes and old pelvic abscesses. A few months ago I saw a case of supposed typhoid fever, which developed after a rapid dilatation, and would add for the benefit of my younger fellows that if they be observant that "typhoid fever" cases are a very common sequelæ of dilatation of the cervix in certain cases of pelvic diseases. Let us see for a moment the nature of this so-called "fever." The case perhaps is one of dysmenorrhœa, due not to stenosis, but to ovarian or tubal disease caused by placental debris from a previous miscarriage, from indiscriminate use of intra-uterine caustic applications, and improper drainage. An old fire which has been smothered—a latent inflammation is again converted into an active one; the tubes, being a chain of abscesses with broken down caseous walls, are easily ruptured and a leaking of pus into the abdominal cavity at once takes place. We now have a case of so-called "typhoid fever," or an acute "pelvic cellulitis," but, in truth, a pelvic, nay too often, a general peritonitis and death. If you will observe, these same patients seem to have frequent relapses, and, indeed, seem to be extraordinarily susceptible to "typhoid fever."

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So much is said from year to year on the subject of cleanliness that it might appear commonplace and useless for me to say one word about it. I have no apology to make, however, and must add a few remarks. The lessons in cleanliness have not been thoroughly learned or their importance properly appreciated in gynecological and obstetrical work, and particularly the private lying-in work. Some eight or nine months ago I was hurriedly called to the country to assist a physician in a complicated case of labor. It was a case that required version, and which had been attempted, but failed. The surroundings of the lying-in room were not the most inviting. He insisted that I should relieve him and deliver her if I could. The scene was a gruesome one, but believe me, it was shockingly painful—yes, murderous, when I saw his well-filled dirty finger nails. How any man, in this age of science and preventive medicine, can excuse himself is beyond my comprehension. Charles Lamb while playing at cards with a companion once said: "If dirt were trumps you would have a full hand." This witticism is only too applicable to many who are entrusted with the lives of those who pass through the most sacred function of womanhood—childbirth. (1894)

Section of Ophthalmology and Rhinology—Ophthalmia Neonatorum

JOHN E. MINNEY, M.D., Topeka

This disease is usually caused by the urethral discharge of the mother getting into the child's eye during its passage through the maternal canal, and develops within from two to eight days after birth. While this is the rule of its causation, there are occasional cases in which the cause is from the irritable secretions of the parturient canal. An illustration of the irritability of mucous secretion is seen in the nose and lips of children being reddened and inflamed by these catarrhal secretions from the nostrils.

The disease is not common in the country, but is found mostly in the cities, in foundling asylums and amongst the immoral classes.

It is an acute, infectious, specific disease, having a stage of invasion and development, and is self-limited.

During fœtal life the eyelids are held together by the sticky parturient secretions. Immediately after birth these secretions are washed away and the eyes are opened. In many cases the change of conditions and the exposure to wind and light, and possibly smoke and dirt and poor ventilation, causes the mucous membrane and the glands of the eye to secrete freely, and the eyelids remain more or less agglutinated and they become thickened and the conjunctiva reddened. In this condition careful cleansing with clean, warm water or a weak boric acid solution is all that is necessary. In some of these cases a follicular conjunctivitis develops, and, while it is not dangerous, it is persistent.

The eyes continue to water, the mucous membrane becomes thickened, although there may be but little if any reddening of the ocular conjunctiva. A hot saturated solution of boric acid freely applied two or three times in the twenty-four hours, or a two to five grain solution of nitrate of silver, or glycerine and tannin, forty grains of the latter to one ounce of the former, applied once a day, is generally sufficient. The gonorrhœal ophthalmia of infancy is what is commonly called ophthalmia neonatorum and varies in severity.

The usual symptoms are free secretions, soon changing to a yellow, thick discharge, with swelling of the lids with reddened and thickened conjunctiva.

. . . Prophylaxis is what concerns us as much as treatment. Where one eye is involved the other eye should be protected by bandaging or adhesive plasters or a watch crystal.

But by prophylaxis is understood the prevention of the disease. In suspicious cases the vagina should be thoroughly irrigated by several gallons of warm water, and, if you feel safer, add some bichloride one to ten thousand. If the mother is under observation for several days previous to confinement it is not necessary to use so much water at one sitting, but the canal should be washed three or four times a day.

In Kansas the disease is not so common as in the Eastern States, especially in the large cities, and it is much more common in the cities of Europe.

During my experience of nine years in Topeka I have treated some twenty cases. A large per cent of them were not seen until serious injury had resulted, and in not one case, when seen early, has there been loss of sight of either eye, but in the number of cases seen blindness resulted in one or both eyes of half the number.

The statistics given by Haussman of the inmates of blind asylums made blind by this disease was: In Copenhagen, 8 per cent; Berlin, 20 per cent; Vienna, 30 per cent; and in Paris, among 208 blind, young subjects, 45 per cent. In 1876, among the young persons admitted to the blind institutions of Germany and Austria, 33 per cent had been made blind by this disease.

In different countries the variation was from 20 per cent to 79 per cent. In Philadelphia, in 1871, out of 167 inmates of the blind asylum, about 20 per cent had been admitted for this cause.

Since prophylactic measures have been resorted to in lying-in hospitals it had the effect of reducing this number from 12 per cent to 3 per cent in Halle, and in Leipsig, where Crede used his own method, the cases fell from 7.5 per cent to 0.5 per cent. The treatment consisted in putting a single drop of a 2 per cent solution (gr. x to ℥ j of water) of nitrate of silver between the lids of each eye. Practically the same results have obtained in the United States. In the 158 inmates of the Berkeley Institute, California, of 36 cases of binocular blindness 25 per cent was caused by blennorrhœa neonatorum.

Howe found that while from 1870 to 1880 the population of the United States had increased 30 per cent, the number of cases had increased 140 per cent, the number decreasing from the East to the West, but increasing from the North to the South.

I would suggest that a committee be appointed by the chair to obtain information, and if, in its judgment, it is justifiable, it be authorized in the name of this Society to present the facts to the next Legislature and recommend the passage of a law similar to that of Ohio. (1894)

Medical Legislation A.D. 1895

G. A. WALL, M.D., Topeka

The title of my papers, as you will see later on, covers a multitude of sins and their exposé. The intent is to denounce only a few personally, and merely to show the regular profession of Kansas what was done by the committee, or better, some of the committee, for medical legislation during the last Legislature and how it was defeated. I do not desire that anyone shall feel that he has been unfairly dealt with, so I will avoid personal allusions, although I have good grounds to make them, and circumstantial evidence which would certainly criminate some prominent physicians in being instrumental in defeating the law. For the sake of harmony and good feeling, I deem it best that no names be mentioned in this short story of a much abused medical bill, and ditto committee. I intend to avoid all reasons why a medical bill is needed, because that ground has been gone over so often that it is now a tiresome story, but I expect to give as brief and full an account of the actions of the committee as possible, showing what obstacles were encountered and the abuse heaped upon the regular profession of Kansas by the various quacks and pathies.

. . . In order that you may all see the amount of hard work that was done by the committee and that you may lay the blame for defeat where it justly belongs, I desire to start with the meeting of physicians held on May 15, 1894, in this city. As you know that on that date physicians of all schools met in Topeka to adopt a suitable medical bill. When we met, our present Secretary of the State Board of Health had copies of the Illinois law printed and brought before the meeting. After a somewhat lengthy discussion this was the bill agreed upon by the body, subject to some changes, which were to be made, if necessary, by the Legislative Committee appointed by the Chairman (Dr. C. H. Guibor). This committee consisted of nine members, three from each school. After the meeting adjourned, printed circulars were sent to all the physicians in Kansas, setting forth what was done at this meeting and earnestly requesting their hearty cooperation in support of the measure. We also asked

for financial aid, but I am grieved to say the physicians did not have very great faith in our integrity, for the amount received did not permit of the committee indulging in any extravagant champagne supper. The amount received to aid medical legislation was $100, which was expended as follows: To Dr. Dykes, for postage, etc., $53; to D. W. Mulvane, attorney fees, $40; to *State Journal,* for printing, $7. It was now drawing close to the beginning of the Legislature and the committee of nine was found too cumbersome, so in November a meeting was called and a subcommittee of three was appointed by the Chairman, Dr. Guibor, consisting of Dr. C. F. Menninger of the homeopathic school, the writer from the regular and, last but not least, Dr. J. L. Furber of the eclectic, who, at the May meeting, was greatly in favor of stringent legislation and fought so vigorously for it before that body that many of us who had known him were greatly elated to think that he had reformed, but we found that it was only a trance from which he very soon recovered, as evidenced by his actions later on.

The bill was now in the hands of the subcommittee for final revision. We submitted it to legal advice and found that it would have been unconstitutional under our Constitution as adopted, while the same is not true in Illinois where the law is now in active operation. I desire to say that only such changes were made in the proposed bill by the attorneys as would make it conform to our Constitution and save it should the courts be called to pass upon it; the text remained exactly the same as the one adopted at the meeting. The bill was then submitted to Dr. C. F. Menninger for his approval, which he gave, but we did not consult Dr. Furber because he said the bill on the statute books was good enough for him—what a wondrous change of opinion! Later on the doctor changed his front again, as I will show by his connection with another meeting. During the week or ten days before the meeting of the Legislature Dr. C. H. Guibor and myself spent many nights in Copeland County getting acquainted with the various members of the Legislature and endeavoring to obtain as favorable a House Committee as possible. Through the kindness of Mr. Speaker Lobdell we were permitted to suggest the names of a number of gentlemen, any of whom would be agreeable to the physicians of Kansas. I desire to say here that Mr. Lobdell was heartily in favor of a good medical law. Shortly after the Legislature convened the following gentlemen were named on the Committee of Hygiene and Public Health, viz: J. A. Campbell, Doniphan County, Chairman; Dr. George W. Hallenbeak (Rep.), Gray County; Dr. J. S. Halliday (Rep.), Comanche County; Dr. Frank H. Smith (Dem.-Pop.), Sherman County; Geo. W. McKinney (Pop.), Mitchell County; Alfred Pratt (Rep.), Hamilton County; G. G. Cornell (Rep.), Waubaunsee County. Before the committee was named Mr. Cornell was heartily in favor of a medical law; in fact said ours was not strong enough, but for some unknown reason he declined to sign the committee report and also voted against the bill on final passage. The Senate Committee being a standing one, there was no change in the personnel from the previous session. Its members were: Dr. E. T. Metcalf (Rep.), Chairman, Anderson County; D. McTaggart (Rep.), Montgomery County; Levi Dumbald (Pop.), Lyons County; A. E. True (Pop.), Waubaunsee County; John Armstrong (Pop.), Barton County. The majority of this committee, as you see, were Populists. We appeared before them once and then became thoroughly satisfied that our labors before them would be in vain. They would not listen to any argument, but insisted on saying, "Just put me down against the bill," claiming it was class legislation and the people did not ask for it. On February 4, 1895, a joint meeting of the Senate and House committees was held in the Lieutenant Governor's room to hear all arguments for and against the bill. The medical profession at large was represented by Dr. C. H. Guibor and myself, other physicians having been invited but failed to come. The opposition, led by F. P. Baker and T. E. Bowman, consisted of Christian Scientists, Clairvoyants, Spiritualists, Mind-healers, Vitopathists (whatever they are); the Homeopathists represented by Dr. Eva Harding, and the Eclectics represented by the dignified and irrepressible Dr. Furber. It was before this meeting that the doctor had an amendment to the old law, which he desired and insisted should be adopted if any law was to be passed. His reasons therefor I fail to understand, because he did not fall within its scope. I was unable to obtain a copy of the amendment, but indistinctly remember the sense of same; it was somewhat as follows:

Be it enacted, etc.—Sec. 1. Whoever shall remove the ovaries of a young girl under 40 years of age shall, if found guilty, be fined in the sum of $500 and sentenced to the penitentiary for fifty years.

Sec. 2. Whoever shall remove one or both testicles from a youth under 45 years of age, or any time before the menopause, shall, if found guilty, be fined in the sum of $1,000 and sentenced to the penitentiary for fifty years.

But the main argument of the evening against medical legislation was made by Bro. T. E. Bowman, who was selected by Bro. F. P. Baker as the organ of the opposition. He read a lengthy, well prepared and I may say very able address of its kind. It consisted mainly in denunciations and villifications of the regular school, classing them as drunkards, opium eaters and instigators of the liquor habit among the people. The medical bill he denounced as a trust, or an attempt to form a monopoly, by which we could rob the "dear people." Of course Mr. Bowman does not believe in monopolies, but I am sure that when the

rate of interest is endangered he becomes greatly excited. I wonder if he thinks about the "dear people" when they are compelled to borrow? But, pardon me, I am transgressing. The most amusing part of this meeting was the forced union of the various pathies in their endeavor not to tread on one another's toes and still remain united in the villification of the regular school. The weight of their argument before the committee may best be judged by stating the fact that all the members of the Conference Committee present that night voted for the bill, thus refuting the statement that F. P. Baker defeated the bill. I am convinced that the bill met its defeat at the hands of a certain medicine company, whose headquarters are Keokuk, Iowa, assisted by pretended friends of the measure. This medicine company, known as the Baker Medicine Company, I believe, have been and are now selling medicine from wagons in Kansas. They objected strenuously to section 10, which related to itinerant vendors of drugs, nostrums, etc. They are well aware that the passage of that act would decrease their income many thousands of dollars per year. I am informed by an old schoolmate of Eugene Baker's, that they started in some years ago on a small scale, but have become very wealthy. They stated to a gentleman in Topeka that they had forty wagons traveling in Kansas and would be willing to pay $75 per annum for each wagon, $3,000 per year—quite a good license you see. But the committee were under obligations to put that bill before the Legislature without such a radical change, for in the bill the license was placed at $100 per month. After it was in the hands of the committee we could suggest such changes as we thought best. It was introduced in the House on this basis, but it was changed before it went before the Senate by parties to whom it was intrusted to be introduced. As soon as the bill was adopted at the May meeting this firm was notified of the fact by letter, and during the early days of the session a representative of that firm remained in Topeka at the Copeland Hotel, where it was possible to interview the members. I am also informed that a certain amount of money was demanded of him by parties (not members of the Legislature) to defeat section 10, and these were deeply interested in the adoption of the Illinois law, where this clause remains in force. I am likewise informed that members of the Legislature were invited to visit a certain office to meet either Mr. Baker or his representative. This is hearsay, but subsequent events lead me to believe that they were true as they came to me through intimate friends of the bill. I am again informed that Mr. Baker thinks, since the Legislature adjourned, that he was buncoed. As I said above subsequent events lead me to believe that these stories were not groundless, because when members of the Legislature were approached regarding the bill, their first query was, "Does the bill shut out these medicine vendors who sell medicine from wagons throughout the State? If it does I am opposed to it." How solicitous these gentlemen were for the welfare of a firm which does not spend one cent of money in Kansas and on the other hand takes out thousands of dollars a year. How peculiar that these legislators so quickly picked out what was objectionable in the bill. Their attention may have been called to this section by some agent of this medicine company. Even some of our prominent physicians in the State objected to this section and asked that it be cut out, in fact did modify it according to the wishes of this medicine company, and so introduced it in the Senate.

Query: Why should any physician who had the good of the profession at heart desire that such vendors should still be permitted to sell their nostrums to the dear people of Kansas? It would seem to one that perhaps some very great moral suasion was used in their behalf. Be that as it may I leave this to your individual judgment and decision. From the change of side of some of the Populist Senators it was evident that some force was at work to defeat the bill if section 10 was left in. So after due consideration and for the welfare of the bill we decided to modify it so it would meet the approval of these opponents, who were all anxious, or appeared so, to shut out quack doctors, but would not consent to keeping out itinerant vendors. We changed section 10 to read, "Any itinerant doctor who shall open up a transient office, etc., shall pay $100.00 per month, etc." We now supposed the bill would meet with no more antagonism, but we were sadly mistaken. The House committee made the change at our suggestion, but the Populist members of the Senate committee could not see their way clear to do so and killed the bill without consideration. We almost got down on our knees and implored them to at least report the bill back to the Senate and let it take its place on the calendar, but they would not do so. Dr. E. T. Metcalf, the Chairman, filed a protest against the majority report, and said report appears on the Senate journal. We now saw that medical legislation was killed, but we desired to place the parties on record by their votes, so by hard work and constant attention we succeeded in getting the bill on final passage in the House on Saturday, March 2, 1895, by the following vote:

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After the passage of the bill in the House it was at once messaged to the Senate. Under the rules a bill to go on third reading without taking its regular course, requires unanimous consent. When this was asked for by Dr. E. T. Metcalf, Senator Cooke (Pop.) objected, and we then felt that it would die on the calendar, but later Senator Metcalf made another attempt and succeeded in having it placed on third reading. When the bill was called Senator Householder moved that it be stricken from the calendar, which motion prevailed. All the Populists except Senator True voting for it, and the Republicans and Democrats against the

motion. To Senator Metcalf is due the entire credit of getting the bill to a vote in the Senate, and had it not been for either the narrow-mindedness or other reasons of the Populist majority the bill would at least have been treated fairly by its being read and discussed and killed on its merits or demerits. But notwithstanding the earnest imploring and eloquent appeal of Dr. Metcalf to the Senate to at least read the bill and see what important changes had been made, they refused to do so. They had not forgotten the promises made early in the session. It was said by a physician before the State Board of Health that the reason the physicians did not take any interest in the bill was because they were not invited. I am sure this gentleman spoke for himself and not for the physicians collectively. I desire to say in reply to that misstatement that they were all invited, as the gentleman will learn if he will kindly look up the circular letter sent out to all the physicians last May. There also appeared in the *Kansas Medical Journal,* January 26, 1895, the following on page 49: "We desire to call the attention of physicians interested in medical legislation that the bill now needs their attention and hearty support or it may meet with defeat." This was written by myself, and again a prejudiced and malicious falsehood is nailed.

Had not Dr. Guibor, Dr. Ward, myself and one or two others interested ourselves, even neglecting business to do so, the bill would have died in committee, and all the thanks we have gotten is abuse. So ends the story of a medical bill for which so much hard work was done by its friends and a proportionate amount by its enemies, but I am constrained to remark, in closing, that it was murdered in the house of its friends. I trust I have given as true a history of the work of some of the committee as memory permits. I have refrained from personalities, although strongly tempted not to do so, for the sake of harmony and to prevent an uncharitable feeling toward myself by some who are too prone to jump at false conclusions as to the intent of this paper. I would like very much to have named the moral cowards who pretended to me that they were anxious to have a medical law, but who used the stilletto with the vengeance of a Mexican bandit, who you all know never faces his victims but stabs them in the back. (1895)

Appendicitis

GEORGE M. GRAY, M.D., Kansas City

Inflammation of the appendix vermiformis, or appendicitis, is a subject that has received a great amount of attention during the past five years, both from surgeons and physicians. The pathology of the disease has been closely studied, and the information gained from early operation has been of great value in clearing up the pathology, and giving a clear understanding of the pathological condition in the early stage of the disease. From knowledge gained in this manner, and from post mortem examinations, we have learned that infections of the appendix vermiformis are the cause of almost all inflammations of the right iliac fossa, and perityphlitis and ileo-cecal abscess are disesases known to be secondary to and caused by inflammation of the appendix; and we have also learned that there is no such disease as idiopathic peritonitis, but that all cases of peritonitis starting or having their origin in the region of the caput-coli are, almost without exception, dependent upon a diseased condition of the appendix; that inflammation of the vermiform appendix is of common occurrence is now generally admitted, and observations made on the post mortem table have shown it to have been the seat of inflammation in about one-third of all subjects examined; this has been one of the strong points advanced by physicians who have contended for the medical treatment for certain forms of inflammation of the appendix. . . .

As to different forms of inflammation of the appendix, numerous classifications have been suggested by different observers, such as catarrhal, perforative, ulcerative, etc., I believe that the classification given by Dr. John B. Murphy, of Chicago, indicates more clearly the pathological condition existing in the several forms. His classification is, first, simple pus infection, which produces the catarrhal variety; second, extensive pus infection by the bacillus commune or pyogenic microbe producing gangrene in a greater or less portion of the appendix; third, pressure atrophy, with infection of the appendix, either by fecal concretion or foreign bodies; fourth, retention accumulations from cicatricial contractions, stenosis or obliteration; of these different forms of appendicitis Dr. Murphy says, that from the reports of autopsies collected he finds that in 70 per cent of the cases there was perforation of the appendix, and that of his own cases collected there was 87 per cent. . . . Can we determine when appendicitis is present? In order to answer this question let us consider the symptoms presented in a case of appendicitis. The first symptom in acute appendicitis is abdominal pain of greater or less severity, referred to the epigastrium or umbilical region: in but few cases is the pain referred to the

region of the appendix in the early stage of an acute attack. The attack is generally sudden, without any premonitory symptoms; the pain is usually described as colicky or cramping, and is usually followed in a very short time by nausea and vomiting. The term "appendicular colic" has been given to this acute pain, and Dr. Fowler says of this term, that he considers it misleading and liable to give rise to indifference on the part of the medical attendant as to the true condition present and the dangers that threaten the patient, as the term colic has generally been applied to purely functional disturbances of the large and small intestines, and that the acute pains of appendicitis are due, on the contrary, to an inflammatory condition which may rapidly involve the entire organ and place the patient's life in the greatest jeopardy, and if the colic be of appendicular origin, then appendicitis in one of its forms is already in progress. Nausea and vomiting occurring coincidently, or shortly after the abdominal pain, is significant; the vomiting usually ceases when the contents of the stomach has been ejected, and the nausea disappears after a few hours, but may recur on perforation of the appendix or extension of the septic process. The character of the vomit is often of importance as indicating the condition present, as in cases where the general peritoneal cavity is involved the vomited material will be greenish and serous in character. In intestinal paresis the vomited material may be stercoraceous as a result of reversed peristalsis. Constipation usually precedes or accompanies the attack, but is not constant, some cases being preceded or accompanied by diarrhea. Tenderness in the right iliac fossa is an early and marked symptom, and taken in connection with sudden abdominal pain, accompanied with nausea and vomiting, it is the symptom of the greatest importance in arriving at a diagnosis; while the tenderness may be more or less diffused over the fossa, yet, on finger-point pressure one point will be found to be decidedly the most sensitive, and this point will usually correspond to the inflamed appendix; this point is usually found to be in the adult from one and a half to two inches inside of the right anterior superior spinous process of the ilium, on a line drawn from the process to the umbilicus, this being known as McBurney's point, and marks the exact point of greatest tenderness in a large majority of cases. This point of greatest tenderness will vary somewhat with the position, length and portion of the appendix involved. Fever to some extent is present soon after the attack begins, and varies considerably, but is no indication of the severity of the attack, for we may have a temperature of 103° Fahr. in a case where the appendix is safely walled off from the general peritoneal cavity, and only a temperature of 100° in another case where the appendix is distended and ready to burst with no protecting adhesions. The pulse is usually accelerated and is of more value than the temperature in determining the condition present, for it will indicate the amount of constitutional disturbance, and this will depend to a certain extent upon the amount of peritoneum involved and the form of sepsis present, but as indicating the gravity of the case and determining when an operation is necessary in these cases, as has been claimed by some observers, it is totally unreliable, for we may have a most serious condition present in the appendix and the pulse give no indication of said condition. Tympanitis is not an early symptom of any importance; it may or may not be present, but when present in any marked degree is an unfavorable symptom, indicating intestinal paresis. Rigidity of the muscles on the right side of the abdomen is a constant and valuable symptom; in general peritonitis there will be rigidity of all the abdominal muscles. Chill during the progress of an attack of appendicitis is a symptom indicating either perforation of the appendix or some extension of the septic process, but is not always present. Œdema of the abdominal wall over the region of the appendix is a symptom of some importance as indicating the presence of pus, but is not generally present early in the disease. Tumor can rarely be detected during the first thirty-six hours of the disease, but is usually present and can be detected on deep pressure after this time, and sometimes earlier where the appendix is situated close to or in contact with the anterior abdominal wall; the tumor consists of coils of intestines and sometimes omentum with the appendix bound together with inflammatory exudate for the protection of the general peritoneal cavity. . . .

As the case advances other symptoms manifest themselves, such as œdema of the abdominal walls over the region of the appendix, tumor, more or less irritability of the bladder may be present, especially in cases where the appendix is long and hanging down into the pelvis. Vaginal examination may be of some service in determining the location of the diseased process, but the information gained by careful history of the case and consideration of the early symptoms, will be of greater value. It is exceedingly difficult in some cases to differentiate between appendicitis, right-sided salpingitis, or pyosalpinx; indeed the appendix may be involved in these inflammations, and a differential diagnosis will be impossible without exploratory laparotomy. The making of an early diagnosis in appendicitis is of the greatest importance, and it seems to me the diagnosis in these cases is usually easy if the case be carefully watched and the administration of opiates withheld; which, if administered, will often so mask the symptoms as to make the diagnosis uncertain; for this reason, opium, in any form should not be administered until the medical attendant is certain of his diagnosis, and even then it is questionable if the patient is not better off without it. . . . These cases generally come under the care of the general practitioner first, and on him rests the responsibility of an early and correct diagnosis. As to

the medical treatment in these cases, I believe that a saline cathartic should be administered early in the case where constipation is present. Perfect quiet should be enjoined with absolutely liquid diet, with sufficient doses of phenacetine or antikamnia, or if necessary codea to quiet pain, and that removal of the appendix be advised as soon as diagnosis is certain.

Prognosis—Dr. Fowler, in writing on the prognosis of appendicitis, says: "The prognosis of appendicitis is unfavorable in cases treated non-operatively, in proportion to the severity of the infection; and in cases treated surgically, in proportion to the delay in instituting operative interference." In 176 fatal cases of perforative inflammation of the appendix collected by Dr. Fitz, 60 died during the first five days, 46 during the first four days, and 28 during the first three days, and eight on the second day. These cases show the importance of prompt surgical interference in cases of acute appendicitis. With our present understanding of the pathological condition present in a case of progressive appendicitis, and with a realization of the dangers that threaten the life of our patient, from infection of the peritoneal cavity, retained mucopus within a constricted appendix, and the rupture of this later into an unprotected peritoneal cavity, ulceration and perforation from foreign bodies contained within the appendix, or from gangrenous conditions of the appendix, and the hopelessness of both medical and surgical treatment of these cases when they have reached the stage or condition of diffuse septic peritonitis, and since there are no certain symptoms by which we can distinguish these cases that may be less dangerous and would recover from the present attack without operative interference, and when we consider the uniformly good results obtained by early operation, it seems to me that our duty is clear, and that we should advise operative interference in all cases of acute progressive appendicitis as soon as the diagnosis is clear. . . .

As to the operative treatment in these cases it must vary to suit the individual case, and the stage of the disease. If the operation is done early, before there is much infection of the peritoneal cavity, the appendix should be sought for and removed, and the cavity simply packed with iodoform gauze. Where there is pus in any quantity about the appendix care should be taken not to infect the general peritoneal cavity, by first, packing sterilized gauze about the appendix so as to prevent the entrance of pus at any point where the peritoneal cavity may have been opened and the pus should be immediately removed by sponging away with sterilized gauze, no water or antiseptic solutions being used in the wound. The appendix should be removed by placing a ligature around it at the base and a second ligature around the mesentery and cutting it away. Drainage tubes are unnecessary where the abscess cavity is small. The strictest asepsis should be practiced in all these cases, both in regard to the cleansing of the field of operation, the sterilization of the instruments, sponges, etc., and the cleansing and disinfecting of the operator's hands. In cases that are operated upon late it may be advisable to simply open the abscess and drain.. Where the abscess is opened without opening into the general peritoneal cavity, as is possible in some cases, then there would be no objection to cleansing the abscess cavity by irrigation with sterilized water; but where there is any probability of the general peritoneal cavity being opened into, irrigation should be avoided for fear of carrying the infection into the general peritoneal cavity.

The advisability of removing the appendix in these late operations will be a question for the operator to determine. Where there is a large abscess cavity, with the appendix bound down by adhesions, the danger of infection of the general peritoneal cavity that would be incurred by the breaking up of adhesions in removal of the appendix might justify the operator in leaving the appendix, especially where the condition of the patient is not good, as is often the case, and trust to nature to repair the diseased condition by sloughing away of the appendix, or where a sinus may remain, to a second operation when the condition of the patient has sufficiently improved; but where the condition of the patient will permit, I believe it is better to remove the appendix, if possible, even in these late cases, and with proper precautions there is no great danger from infection of the peritoneal cavity by the necessary efforts to remove it.

In operations on chronic recurring appendicitis, when operated upon during the quiescent stage, the appendix should always be removed. . . .

In these cases the abdominal wound should be closed and small drainage tubes with strip of gauze to bottom of the wound.

As to the treatment of cases where there is general infection of the peritoneal cavity, or a greater part of it, diffuse septic peritonitis, these cases have generally been regarded as hopeless, and the percentage of recoveries has been small. Indeed the mortality in these cases has been so large that many surgeons have advised non-interference in many of these cases. In the *Medical Record* of March 30, 1895, is an article by Dr. McBurney on the treatment of this class of cases. He reports twenty-four cases on which he has operated during the past two years, of which fourteen recovered. All these cases were treated by incision, irrigation with sterilized salt solution, drainage by strips of gauze and glass drainage tube extending to the most dependent part, but adds that he has had quite a number that he considered to be in too hopeless a condition to justify operative interference, which were allowed to die without operation, but the results he has obtained by this plan of treatment are certainly much better than that obtained by any other method that I know of. . . . . .

(1895)

The State Control of Tuberculosis

W. E. McVEY, B.S., M.D., Topeka

The obligation of a municipality or commonwealth, in the disposition of its citizens afflicted with chronic infectious diseases, depends upon the danger which threatens the population as a whole and the possibility of eradicating the disease or diminishing its fatality. The infectious nature of tuberculosis is too well established to need any further exposition of the facts which demonstrate it. . . .

The well established infectious nature of the disease taken in connection with the fact that in the United States it is estimated that at least 164,250 people die annually of tuberculosis, an average of 450 each day, alarming as it seems, should have awakened a proper appreciation of the great danger which is threatening our population.

. . . It is estimated that, during the last decade, the death rate from consumption in the United States has diminished at least 10 per cent. This reduction has doubtless been due to a better education of the people along the lines of the care and prevention of disease, and such restrictions as have been placed upon the spread of tubercular infection by certain States and Territories; but particularly due to a better understanding of the pathology and treatment of the disease by the medical profession. . . . The results are encouraging, though they do not approximate what may be or has been accomplished by the rigorous enforcement of quarantine regulations. It is a surprising fact that we must go back in our history more than a hundred years to find definite reports upon this point. A hundred and twenty years ago the kingdom of Naples was afflicted with a scourge of tubercular infection which threatened to depopulate the kingdom. A most rigid quarantine system, enforced by fines and banishment, and made more effective by fire and isolation, resulted so far in the eradication of this disease that this once greatly afflicted country has now the lowest death-rate from tuberculosis of any country in the world.

I would not suggest that the tuberculous element of our population be subjected to the hardships of rigid quarantine regulations, because I believe such a course impracticable and unnecessary. I do think, however, that some of the principles of the quarantine may be safely and profitably adjusted to the present needs. We can only speculate upon the ultimate end of any legislative enactment for the regulation or control of tubercular infection. It is altogether probable that no such legislative interference would result in any pronounced or permanent benefit. In a great republic, where laws must be enforced as well as made by the people, there must first be a strong public sentiment in their favor or such laws soon become inoperative.

Health boards have occasionally recognized the danger, and have issued circulars for the public information in regard to the care and prevention of tuberculosis. . . . Until the people can be thoroughly convinced of the infectious nature of tuberculosis little can be hoped for from legislation.

Spitting ordinances have been adopted by various cities, but in nearly every instance have soon been utterly disregarded because the people attached no importance to them except as a means of satisfying the importunities of a few over-fastidious individuals.

Laws which relate to the spread of bovine tuberculosis have been made and are tolerably enforced in a number of States in this country. . . . Sufficient evidence has not yet been produced to positively determine the susceptibility of the human organism to infection by the bovine tubercular virus; there is on the other hand, not sufficient evidence to the contrary to justify us in ignoring this possible danger, and we are therefore justified in assuming that all laws regulating the spread of bovine tuberculosis and guarding against the use and sale of infected milk, are directly in line with any effort which may be made to suppress or eradicate this dread disease.

. . . By a general consensus of opinion we accept the Koch bacillus as the *sine qua non* in tuberculosis, but since our present knowledge does not comprehend a tangible means for the control of its dissemination or virulence, I do not believe we will derive much benefit from a repetition of what is known about it. . . .

A very early observation, which is no less noticeable now and no less true on account of its ancient origin, was that carnivorous men and animals were comparatively immune to tuberculosis. . . . I believe if there is a difference it lies in digestibility, ease of assimilation, and relative food value [of meat]. It is quite commonly observed that tuberculosis patients show most rapid improvement who are restricted to a meat diet, and though we are unable to establish a definite relation between tuberculosis and a deficient meat diet there is a cachexia closely related to the habit of large meat consumption which is strongly opposed to tuberculosis, in fact very closely approximating a true immunity. . . . We are hardly ready to assume that there is a specific immunizing element present in these conditions; I am inclined to believe that this immunity or vital resistance depends upon the maintenance of an equilibrium between tissue metamorphosis and the process of reconstruction. A study of first principles shows us that all nitrogenous compounds are unstable. They are readily decomposed and readily

changed from unstable into stable compounds and in this change evolve both force and heat, as we see in the arts great and sudden expenditures of energy frequently accompany the molecular changes which take place in highly nitrogenous compounds. All functionating tissues of the body are composed of nitrogenous matter. Ferments, which during their own molecular changes set up changes in the oxyhydro-carbons, are all nitrogenous. And we find that in all organisms where there is even slight vital activity the molecular changes are initiated by substances containing nitrogen. In the reduction of non-nitrogenous compounds heat is evolved, and when the reduction takes place within the tissues force or vital activity may be produced, but the molecular change is initiated by the nitrogenous elements of the tissue. There is then a concomitant metamorphosis of the nitrogenous compounds of which the functionating tissues are built and the non-nitrogenous compounds which permeate them, during the ordinary vital activities of an animal organism. . . .

The most important element in the production of these molecular changes is not taken in as food, but, in the higher animals, by the respiratory organs. The presence of oxygen is essential to the molecular changes in both the nitrogenous substances of the tissues and the non-nitrogenous substances, and any interference with its supply, by changes in the respiratory organs or in the circulation which distributes it through the tissues, or in the environment from which it is derived, must interfere with a perfect equilibrium between waste and repair. . . .

Poor digestion and faulty assimilation hamper the efforts at reconstruction, as also does deficient lung capacity, by limiting the supply of oxygen to the blood, and a defective circulation by an inadequate distribution through the tissues. . . .

Probably in this lies the explanation of the necessity for the individual selection of climate according to temperature and atmospheric density. Sunlight is one of the essentials in the successful treatment of tuberculosis, because it invigorates the vital activities and because it is quickly and surely destructive to tubercle bacilli. These invidious little atoms of organic life, which are capable of great achievements in the dark recesses of the human anatomy, droop and die when exposed for even a short time to direct sunlight. These things, which have so much to do with determining the question of pre-disposition or immunity, are not to be regulated by legislation; in fact, I do not believe either in the present or future efficacy of legislation directly against the spread of tuberculosis. Some regulations may be adopted which will assist in giving the people a better understanding of the nature of the infection and enable them to better protect themselves. In addition to the general distribution of literature upon this subject, the principles of hygiene and the nature of the various infections, periods of incubation and means of prevention, should be taught in our public schools. During the most critical period in the lives of our children, their mental development is being crowded at the expense of bodily vigor and functional perfection, and the foundations being laid for many of the chronic ailments which it is our province to investigate. This condition of affairs might, I think, be greatly modified if there were adopted into every curriculum in our public schools a course in physical culture. I do not mean the "finicky," faddish, society drill, which has nothing for its object but perfection in beauty and grace in movement. I mean such exercises as will develop the chest and increase the lung power so that plenty of oxygen will be supplied to the tissues; that will give tone and strength to the flabby heart muscles and send the ruddy glow of health to the fading cheek; that will give power to the limbs so that walking will be a pleasure. These things lie in the way of both legislation and education, and will do much toward preventing the spread of tuberculosis. . . .

Sanitaria for the treatment of the consumptive poor have been demonstrated to be the most efficient means for diminishing the death-rate and the most adequate against the prevalence of the disease. In those cities of Germany where public sanitaria for consumptives have been in existence for many years the death rate from tuberculosis has been diminished at least one-third.

The percentage of cures is much greater under sanitarium treatment than has been shown by any other plan. Climatic conditions forming the principal attraction of health resorts, are soon obscured in their therapeutic importance by the general prevalence of tubercle bacilli. The sanitarium maintains its value by stringent rules of hygiene, which can be only very imperfectly enforced by the local authorities of the ordinary health resort. There are but few institutions for the care of consumptive poor in the United States, but the results at these institutions are sufficient to demonstrate the possibilities along this line. The average cost for caring for hospital inmates in New York City is one dollar per capita, but in other institutions for the care of consumptive poor only, the cost per capita has been reduced to fifty cents per diem. In view of the fact that a much larger per cent of cures result from sanitarium treatment, and also that in localities where such institutions are established a great decrease in the prevalence of the disease has been noted, it seems to me that every State should provide for the care of its consumptive poor and for the protection of its people against infection by the erection and maintenance of suitable institutions of this kind. (1900)

Fractures from the Standpoint of a Country Physician

W. B. MEAD, M.D., Oberlin

While my subject is "Fractures," I prefer that my remarks shall partake of a disquisition or plea for the preservation of the country surgeon, rather than undertake to advance anything new in the technique and surgical procedure of the treatment of fractures.

In the development of the civilization of nations and peoples, surgery precedes internal medicine. The earliest records which relate to surgical operations came from Egypt. There was nothing of surgical interest in Greek literature between the time of Homer and Hippocrates; but from Hippocrates to Hunter and from Hunter to Senn, the advancement of surgery has been going on. But the progress of the nineteenth century surpasses the two thousand years preceding, for in this century occurred the discovery of anesthetics, the establishment of aseptic and antiseptic surgery upon the scientific foundation of the new science of bacteriology. The numerous hospitals that have been built, the dissecting room and laboratory, the X-ray, microscope, thermometer and ophthalmoscope, have given an impetus to modern surgery. The country physician has at no time in his history had so great an opportunity to perfect himself in the surgery of fractures, at least, as he has today.

. . . . .

The hospital is well enough for the city physician, but it ought not to be the burial place of the ambition and aspirations of the country doctor. Certainly a four-year course will render better qualified the physician whose abilities in the line of surgery are not blighted by the shadow of the hospital. Again, if the country doctor surrenders what surgery he is competent to do, he becomes unscientific and must practice medicine by circular, or go into politics for recreation and emolument.

In my twenty years experience in the short grass country, my greatest triumphs are to observe smiling patients, walking without hesitancy, who had suffered compound, comminuted fractures of the leg, for by rigid asepsis and daily observation I had been enabled to save their extremities that years ago would have suffered amputation.

We want to keep alive the self-confident, self-assured country surgeon. Instruments are in price within the reach of every physician, he can disinfect the hovel if need be; literature is ample and cheap, and he can return to his alma mater and brush the cobwebs of disuse from his brain.

The day for the ignorant bone-setter is past. The surgeon today must be a scholar and a genius, because much is by right expected of him. Surgery now-a-days means "to save," instead of "to destroy."

In the country the surgery is meagre, and we should devote all the time necessary to rehabilitate our patient. I have treated fractured femurs, twenty miles distant from town, with perfect success.

There is no reason why the country surgeon should not be accurate in his diagnosis and treatment. A fracture is a solution in the continuity of a bone or cartilage, produced by violence. A fracture may be partial or complete; transverse, oblique or longitudinal; single, double or multiple; simple, compound or complicated. Symptoms of fracture are loss of function, absence of normal contour and crepitus.

In case of a fracture in the country, the messenger makes great haste for the doctor, like David Harum, when his wife collapsed, in his race for the doctor he says, "I done the heat of my life," and usually the swelling is not so great as to prevent an accurate diagnosis. The surgeon must at all times be ready for every emergency. The diagnosis is not attended with difficulty, provided displacement, mobility and crepitus are present. For the lower extremities, plaster of paris is the splint par excellence. For the arm and forearm, where the vessels are superficial, plaster of paris is not well adapted. The retention of the fragments in apposition is the object desired. Redressings are necessary to observe the parts, and see that the patient does not suffer from tight bandages. The old doctor with his long Liston splints and good results, we ought to be successful with plaster of paris, so much easier of adjustment and retention.

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As to splints, the surgeon must be governed by the individual case. Patent splints should be excluded, for it is absurd to think of different limbs being moulded in the one procrustean bed; here is where the genius of the individual surgeon comes in, in his adaption of the splint to the perfect adjustment and retention of the fracture to be treated.

In complicated fractures or fracture dislocations, where thorough irrigation and drainage are necessary, require especial care and treatment, as well as those

cases of non-union due either to local or constitutional causes, where wiring of the bones becomes essential to a complete union.

I have not, in my country practice, observed the rules of the hospital as to the application of temporary and permanent dressings; for often in the country it is proper and convenient to apply the permanent splint at the first dressing, being careful to envelop the extremity well in absorbent cotton before applying the plaster of paris and the danger from gangrene following compression is reduced to the minimum.

The first thing after perfect coaptation of the displaced bones, is to apply surgeons' plaster over the immediate seat of fracture; its retaining power is underestimated.

In all crushing injuries the immediate application of plaster of paris over absorbent cotton, carefully watched, restores the circulation and saves the parts from amputation; for if the injury is to the extremities, they have a very abundant supply of blood vessels, which travel and radiate throughout every muscular fiber, and which form such a network over the fingers and toes that, unless the member is lacerated around its entire circumference, we may hope that sufficient vitality remains to preserve a healthy regenerative action.

For sprains, the constant application of hot water for twelve hours, followed by the application of splints, completes the cure.

The old plan of lotions or liniments for sprains is obsolete, and even the hot water dressings may be dispensed with as a primary dressing, applying the splints at once and putting the injured parts at rest.

In the treatment of fractures, never forget the patient.

To the well-to-do, the hospital, however remote, may offer you competition, for the friends may urge the patient's removal to the hospital, though you may feel competent to render all necessary treatment.

Heat and heart stimulants will relieve the shock, while careful vigil and tact will assure your patient that he is in safe hands.

There is no reason in this enlightened age why the country surgeon should not, in cases of fracture, furnish the requisite and ordinary skill for the successful treatment of these cases.

Fractures are the special domain of the country doctor and must ever remain so, and while he might pause at an ovary or an appendix, he ought not to fail in the treatment of a fracture.

It is nominated in his diploma as explicitly as were the contentions of Shylock in his bond, that he is a surgeon, and we dislike to note his decadence.

The surgeon who fails, is as open to attack as the Westminster Confession of Faith is now to assault, although what is, ordained and inscrutable, and what will be decreed.

As to whether he fails or succeeds, depends on the man; the texture of his convolutions, his education, his perception and judgment. Here he is chief of the staff. He ought to be proud of his noble calling, and, as Milton says: "To scorn delight and live laborious days," to maintain his reputation. (1900)

From the Proceedings of the Kansas Medical Society
30th and 31st Annual Meetings
1896-1897

NOTICE

This report does not include the papers and discussions for the simple reason that there was not enough money on hand to publish a full report, and the officers did not feel justified in contracting a debt for the Society. Prompt attention on the part of each member to the payment of dues will insure a complete report of the next meeting.

How Much of the Specialties May the General Practitioner Do

L. REYNOLDS, M.D., Horton

Specialists have so encroached on the work of the general practitioner for some time that some defense seems necessary. Every department of medicine is necessarily full of responsibility, and he who endeavors to escape easily can never gain a desirable practice. If you argue that to do general practice so limits one's time that he cannot qualify himself, I answer that it is always the busiest practitioner who does most of the specialties. Don't understand me to advocate efforts to do practice for which one is wholly unfitted, but I do insist that the family physician can and ought to be well qualified to do a great deal of work which has formerly been left to the specialist.

We, as general practitioners, are expected to be able to diagnose special conditions, and our special friends will insist on this, apparently unmindful of the fact that diagnosis is frequently more difficult than treatment.

It must be very tiresome to a patient who is the subject of various pathological conditions to be handed around from one physician to another, passing through the hands of several, when one of them might have rendered all and more efficient service owing to a more harmonious effort.

Such policy may be good in medical centers, but it is hard on the subject. Imagine a patient with a not uncommon variety of abnormal conditions, going to Dr. A for indigestion. He is referred to Dr. B to have his refraction corrected. He is next handed over to Dr. C for removal of tonsils, nasal spurs, or other growths. If hemorrhoids, or rectal ulcers should be found among his morbid conditions, Dr. D is asked to cure these, and if the patient be a female the circuit is completed in the hands of Dr. E, who does a curettment or other minor procedure.

Such cases often have a real existence, and how much better that one intelligent physician take and keep charge, doing all that can and ought to be done.

The effort to study all the departments of medicine so diversifies our reading and observation that more may be accomplished than when all effort is confined to one channel.

The tendency in the populous medical centers to minutely subdivide the practice into specialties, may be an advantage both to the patient and practitioner in these localities, but this is not true of us and our patrons in comparatively rural districts. It is rather our duty to know and to do some of all the specialties than to perform the function of assorters and distributors of cases. However, it is the emphatic duty of all unqualified to refer important and difficult cases.

No one should claim that lack of time, but rather idleness, so limits our capabilities as to render us unfit to do a great deal of work ordinarily done by the specialist. One bad habit so wasteful of our time and destruction of our interest is that commonly called loafing. If we do not voluntarily waste time at the drugstore or elsewhere, some well meaning but thoughtless friends may consume our time at the office. This should be avoided in some way, and one avoidable way is to make short but maybe otherwise unnecessary excursions from the office, thus getting rid of the time killer. Have frequently found it necessary to resort to this method of economizing time.

The best material out of which to make a specialist, is the general practitioner, but since but few of us can limit our work to one department of medicine we ought to make the most of every department. There is such an interdependence or relation of one part of the body with every other that general experience is necessary to the best judgment. As the truths of medicine are discovered, its study may be more readily accomplished. We are given shorter cuts to correct conclusions, having to spend less on misinformation which must subsequently be unlearned. Post graduate instruction should be taken and society attendance practiced until such knowledge is acquired. This course will pay as a matter of financial investment. Because of the delicate mechanism and fine functions of the eye, this department of our work is deserving of greater distinction and separation than any other as a specialty. However, the eye specialist cannot reflect on the general physician if the latter do refractive work which has so long and so largely been done by ignorant laymen. We certainly cannot do worse than these in the fitting of glasses, besides this field of work legitimately belongs to the profession. It should no longer be left to the jeweler or traveling vender without an effort on our part to do the work.

At least one physician in every municipality should correct errors of accommodation and refraction. Errors of accommodation are the easier to correct, and is the part that is pretty generally done by laymen.

Habit and precedent are strong things and most of us have a set precedent by our habit of neglecting the specialties.

A little extra effort will be required in beginning a new work, but all such extra efforts will be fruitful sources of knowledge and income.

There is an extensive amount of work and revenue which should be utilized by the family physician in diseases of nose, throat and ear. There is such a relation existing in diseases of these parts that all should be studied together. The great principles underlying the production of these morbid conditions of the nose and throat are drainage and ventilation. Preservation of normal drainage and ventilation is the great aim of treatment.

Improper or obstructed drainage produces stasis, decomposition and sepsis which are apt to result in complications. All enlarged and diseased tonsils should be removed. I know of no exception to this rule other than tubercular or malignant diseases and excision may be best in these. Recurrent quinsy may be thus permanently cured. Ear diseases which grow out of septic conditions of the throat are frequently prevented by timely removal of the tonsils. The crypts of enlarged tonsils are germ incubators and storehouses. The common remark of doctor and layman that "catarrh is incurable" is about to pass away, for the multiplicity of conditions commonly called catarrh are nearly all curable, fully as much so I think, as diseases of the rectum and by similar methods—that is to say, by surgical treatment. Nearly all such diseases are mechanical and if cured must be treated mechanically. A good general knowledge of rectal diseases is readily obtained and profitable. We ought not to allow modesty to interfere with proper examination of this part of anatomy in either sex, when symptoms point to disease of the part. We all know how essential it is to be well posted on genito-urinary diseases, for no community is free from occasional outbreaks of contagious diseases of these organs. Such diseases are frequently treated very unskilfully, the evil effects of which may be very remote and varied, requiring an expert to unravel and remove the sequelæ.

According to my observation, the specialties in which the general practitioner is most deficient are those of neurology and dermatology. A knowledge of nervous diseases is of great advantage for diagnostic purposes although but little practice comes to the family physician from this source. A good deal of this work is of such a nature as to require isolation and restraint, conditions which cannot well be met in general practice.

Diseases of the skin, except the most common and simple, require a great deal of study with close observation, and, at best, are a small source of revenue to most physicians.

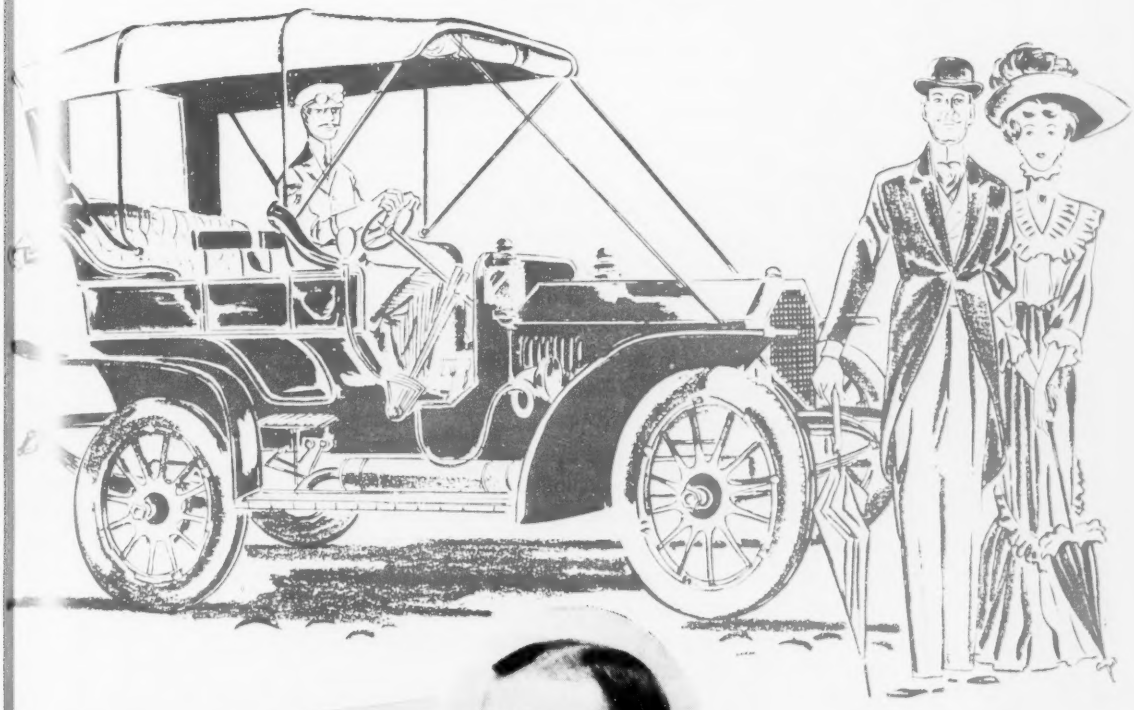
Thus, it is seen that conditions combine to make these specialties weak points with the rank and file of the profession.

Gynecology is the great specialty and numbers far more members than any other. It is but fair to say that a large percentage claiming equipment for this field are without special knowledge. But little work in this line is ordinarily done by the practitioner until after middle life owing to the general impression among laymen that age and time only bring familiarity with female pathology. This should not discourage effort among the younger members of the profession for the tide, especially in the more rural districts, seems to be turning in their favor. To these I wish to say: "Study pathology first, last, and all the time, with therapeutics incidentally."

. . . . .

(1900)

1901
"The Doctor Promotes The Public Health"
1920



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1. First building, KU School of Medicine in Kansas City.
2. Dr. S. J. Crumbine, Secretary, Kansas State Board of Health. (1904-1923)
3. First Kansas built airplane. (1911)
4. Threshing crew, Montgomery County. (1912)

Introduction

We now have electric lights, some electric street railways, and the Western League has been in operation over a decade, with Topeka and Leavenworth represented. The Spanish-American War is over, and a few automobiles are beginning to appear and to frighten respectable teams of horses. Dr. Naismith invented the game of basketball and colleges now have teams engaging in the sport, wearing uniforms which look much like football uniforms (and well they need the padding). The state has survived drouth, grasshopper invasions, and blizzards, and has continued to grow. Kansas agriculture has expanded; and both agriculture itself and farm life are in the midst of a great improvement. Prohibition has been on trial for twenty years, and is still the source of much argument and violence.

Wilhelm Konrad Roentgen has now made his epochal discovery of the x-ray, and its use is beginning to spread. The beginnings of an understanding of immunity have appeared with smallpox vaccination (although it is not yet fully accepted), and limited serum (antitoxin) therapy. The University of Kansas will, in a few short years, establish a four-year course in medicine, having had a two-year preparatory course since 1880. The American Medical Association has recently been reorganized on the principle that state societies are its components, and country societies are components of state organizations. The JOURNAL OF THE KANSAS MEDICAL SOCIETY is ready to make its debut, and will henceforth be the source of our information.

The approaching decades bring a growing realization of the importance of health care for the public—preventive medicine, the control of communicable disease, control of epidemics, and elimination of health hazards. There is also a growing fervor for the clinical practice of medicine and the search for new procedures and techniques, as the doctor promotes the health of the public.

The Journal

OF

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Page One, of the first issue of The Journal
JUNE, 1901

The Origin of the *Journal*

In connection with this matter I might say, we have no representative journal, our proceedings have been published in book form, but it has cost almost as much as a journal would cost, and I hold in my hand a proposal which perhaps it will do no harm to submit to the society, a proposition for publishing a journal for the Kansas Medical Society by A. D. Bauer Printing Company, thirty-two pages each month, five hundred copies, size and style and paper like sample, that is the size of this paper that I hold in my hand, leaves trimmed and wrapped for mailing, thirty-two dollars per month; that would be three hundred and eighty-four dollars per year; for extra pages, one dollar per page; for extra copies, two dollars per hundred. I may mention that the book we have had printed, or rather the proceedings in book form, have cost two hundred and seventy-five dollars, for wrapping and postage thirty-five dollars, making a total of three hundred and ten dollars. In this matter we have had no income, there has been no advertising, but with a journal we could probably make something by taking in advertising matter. The journal would cost three hundred and eighty-four dollars with advertising privileges. I think it would be patent to most of you that something could be saved by having a representative organ. Furthermore, if this reorganization scheme is carried out, we shall need some means of communication. I think this is a matter for the consideration of the Society, and I hope you will take it up. Upon motion, the report was adopted and the Committee discharged.

The President: I will refer the matter of publishing the journal to the Committee on Publication, with power to act. The Committee on Publication consists of the Secretary and the secretaries of sections. (1901)

Editorial

We have for the second time been refused admission to the mails as second-class matter. Why the Kansas Medical Society should be refused the privileges granted to other medical societies and other organizations does not seem very clear. We were informed, when our first application was turned down, that our by-laws should provide for the publication of a journal and an appropriation to pay for it, or that we must have the written order from the members for the JOURNAL authorizing the treasurer to pay the subscription price out of the annual dues. As we could not change our by-laws until the next meeting we requested the members to send us the required subscriptions and sent to each member blanks for the purpose. Out of 246 members 130 have complied with the request. After we had received a few more than one half of the subscriptions we should have received, we made a second application, filing an affidavit to the effect that we were authorized as an officer of the society to publish the JOURNAL OF THE KANSAS MEDICAL SOCIETY and such other facts as seemed to the postmaster here to be required. This application was also denied but upon what grounds we have not been informed. At our next meeting it will be necessary to amend our by-laws to fulfil the requirements of the Post Office Department. Had more of the members replied to our request and filled out the blanks sent to them we feel confident we would have succeeded in getting the JOURNAL through. It is a serious matter in that it costs us much more to mail the JOURNAL and in that we are compelled to cut out most all exchanges on account of the additional expense.

The JOURNAL promises to be a success in spite of the many discouraging features we have had to contend with. Our advertising business shows a healthy growth and it is only a question of time when it will be self supporting. The society should take the matter in hand at its next meeting and make proper by-laws for the publication of the JOURNAL and also provide for an editor and board of managers. (1902)

Just Rewards in the Medical Profession

KATHARINE B. RICHARDSON, M.D., Kansas City, Mo.

The science of medicine is wonderfully progressive but its students cling to tradition with a tenacity that is as wonderful as it is senseless. Long ago the Church and Medicine, joining hands in noble self-abnegation, gave to the world unreservedly and without price all that could be of any benefit to the race. Today both make the same high sounding claim, but know that the words have lost some of their old time meaning. The Church now accumulates non-taxable property representing millions, and Medicine looks enviously at the riches of its neighbors and attempts consolation for its poverty by pretending that the lack of business acumen is the pride of the profession, while it clings to shadowy ideals long since thinned to nothingness and constantly drives from its ranks brainy men who refuse to be bound by its ethical codes.

I want to compare medicine and its followers with other professions and other high grade men. I know it will be immediately claimed that I am making money the measure of success. *This I distinctly deny.* Successful doctors should have paid them all possible honor, but it is not easy to see why in addition they should not be allowed the same means of accumulating money as are permitted to other respected professional men.

Art sets before its votaries substantial rewards of kind and degree as are admitted to appeal to all creatures, medical men excepted.

. . . . .

The scientific man, the inventor, the banker, the business man, may each hope for reward commensurate with his results and each looks at the doctor and wonders why a singular and unexplained adherence to a tradition bars him from so much that is esteemed by his fellows. Held down by indefensible rules he has produced instruments and appliances which are most admirable. Knowing that he personally reap no benefits from his labors, he pursues investigations which result in great discoveries. But, unfortunately, he does not always remain loyal to a profession which fails to encourage if it does not handicap his efforts. He is a doctor, but he is human.

We stand on the defensive, and we try to protect ourselves from the quacks and pretenders who make unacknowledged but great inroads into our reputation, while we blindly remove from our ranks the incentives which make for encouragement of ability. . . . The profession has need of all its brilliant men, and we are foolish if not justly proud of our work; we shut our eyes to the needless obstacles in the path of the practitioner and allow him to stumble into the fold of the ostracized. Law will give but little help. Our opponents are not fools and if we continue to stand we must not foolishly tell ourselves that we as an organization have reached perfection, or that the code laws of long ago are about the only human inventions that must not change. We have a Bureau of this, that and the other to look to the interests of everything but the medical work of the U. S. Why not have a Bureau of Medicine? Is any thing on earth of greater importance than the National health? . . . Always has England recognized her great medical men. Witness *Sir* before the names of Cooper, Lister, Jenner, McKenzie, Quain and Thompson.

We shall never emulate England. It is not the American way. But may we not hope for the time when American Physicians may more thoughtfully consider their code: viewing it with the eyes of the actual present, and together work for the advancement of their brothers (and sisters) along lines which lie parallel with that leading to success in other professions. (1901)

Dr. J. E. Minney is the latest Topeka physician to purchase an automobile. (1909)

Reorganization in the A.M.A.

The members of the Kansas Medical Society should be interested in the reorganization movement of the American Medical Association, because in our plans to reorganize the Kansas Medical Society we have tried to anticipate the action of the A.M.A. How near we succeeded each may judge from the report of the committee, which follows, and which was adopted by the A.M.A.

There seems to be lacking a very necessary feature in this plan of reorganization if it is to bring about any great betterment of state and local organizations, or, at least, if it is expected to make local societies subordinate to the state society. The American Medical Society recognizes all local societies and accepts members therefrom as readily as from state societies. Membership in the A.M.A. should only come through the state society. Life of membership in the A.M.A. should depend upon the good standing of the member in his local and state societies. As it is now, members join state or local societies until they have gained admission to the A.M.A., and they then drop the local affiliation.

The reorganization of the A.M.A. can not be of any material benefit to state organizations until some change is made in the methods of acquiring membership. The advantages of reorganization to the A.M.A. are self-evident and the suggestions to state societies are certainly well pronounced, but state organizations need the assistance and protection of the stronger society if it is to be much of a factor in many states.

. . . . .

While the committee fully appreciates the fact that its duties do not extend below the American Medical Association, nevertheless it has, in the interest of a complete organization, considered the state and local societies, and to complete this urgently required organization of the regular medical profession, offers the following recommendations to the various State and Territorial medical societies:

(a) That each state society shall at the earliest possible moment appoint a Committee on Organization, to which shall be referred, with the Association's endorsement, the report of your committee, and especially that part which refers to state and county societies.

(b) That each state society immediately raise funds and employ an organizer to organize the profession in its territory.

(c) That the state societies unitedly agree to federate themselves in the American Medical Association, and as a preliminary to this adopt a uniform organic law in regard to certain fundamental principles, viz., to divide their annual meeting into two branches, legislative and scientific; the legislative branch to be as small as is compatible with representation from all the county societies, and to be composed of delegates elected by the county societies.

(d) That membership in the county or district societies shall constitute membership in the respective state society without further dues, and that no one be admitted to membership in the state society except through county or regular district societies.

(e) That funds to meet the expenses of the state society be raised by a *per capita* assessment on the county and district societies.

(f) That a united effort be made to influence special societies to limit their membership to those who support the regular organization, and the semi-national and miscellaneous societies to encourage systematic organization, by covering a definite territory and also by limiting their membership to supporters of the regular organization.

(g) That each State society create a permanent committee and a fund for the purpose of enforcing all medical laws in every part of its territory.

(h) That each state society co-operate with the American Medical Association and with the other state societies in solving the problem now before the profession relating to medical education, medical legislation, reciprocity, licensing, etc.

. . . . .

(1901)

We have received replies to the circular we mailed a few weeks ago from about one-half of the members. We are anxious to get The Journal entered as second-class matter. And in order to do this we must comply with the postal laws. Inasmuch as The Journal is published by the society, it is necessary that we have orders from the members for The Journal. We can get it admitted as second-class matter provided we leave out the advertising matter, but we do not wish to do this. We hope to reduce the expense of publication considerably by the income from advertising. As we are now situated we have to pay one cent for each copy mailed, whereas as second-class matter it would cost us one cent per pound. It seems that every member should be sufficiently interested in the society to give a little attention to so important a matter. Kindly fill out the blank sent you and mail to the Secretary at once. (1901)

The Microscope—Its Importance to the General Practitioner

C. E. MUNN, M.D., Topeka

After nearly forty years devoted to studies of subjects upon which the art of modern medical practice depends, it seems that I should be able to say a few words upon a very important help in diagnosis. I may say at once I have done little original investigation, because in my active working life it seemed my imperative duties were to use and practice from the results published of the discoveries of those better qualified. But the experiences of the teachers of my time may not be sufficient now to conduct safely to clear diagnosis, and therefore prognosis, and rational, that is, modern treatment, for so much is it the fact that modern therapeutics is based upon what has been learned in the last two decades of the causes of disease, and not so much upon its clinical aspect.

A book recording the experience and teachings, published fifteen years ago, of many matters of science, may be very useful but not contain vital facts and deductions which must be known today to insure successful practice. . . . They described the "scrofulous diathesis" and illustrated by describing the type of cases. It might be a young girl with large dark eyes, long lashes, fine complexion, "sweet smelling flesh," rounded figure, but on the whole a delicate, not a muscular, physique. . . .

Now how different. The clinical thermometer and the microscope, if employed by any modern student, would reveal the infection, the active cause of disease, and modern surgery possibly removes it while confined to localities within his reach; or the advanced therapeutist might explain the battle of the cells and direct in time the best efforts of improved nutrition.

. . . . .

It has a true value to the working man in medicine and none of us neglect its records. And here I will commence to speak of the microscope, which should be the companion of the thermometer, the stethoscope and the test-tube. I say the companion, not to take the place of other helps, but in due proportion, in daily use, in the office or modest laboratory. If diagnoses be, as some one has said, only the science of probabilities, we need all modern aids, and, in my opinion, the microscope will by the visual sense fill the place the chemistry, the auditory, and even at times all the other clinical signs leave unrevealed. This of course is done by the enlargement of the visual sense. "Seeing is believing" is a trite comment upon evidence, and, with proper care, seeing the cause under a microscope is quite easy, and in comparison is quickly qualified and its importance estimated.

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The man first using his instrument for practical work is not supposed to have anywhere near the knowledge which its use has already revealed, but at first will study a few forms met with most frequently and practice the simplest means of obtaining and displaying them. A fair knowledge of normal histology will be acquired and the morphology of the pathogenic bacteria learned in a very short time, when their significance is properly appreciated.

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But most useful the microscope will prove to the man of "cares and little time," when the conditions first manifested by throat symptoms cause anxiety. If accustomed to use his instrument it will surely aid him. He will have learned to use a little clean cotton to bring home a specimen of the exudate upon it for examination. A few tubes of proper culture media will be kept for this work. And selfish or professional interest will incite to the study of the infecting forms known as particularly dangerous. One will not wait for this examination, or withhold the essential treatment if the clinical signs show plainly what to do; but what a comfort to the physician, and of what vital interest to the patient and the community, when the doctor in the quiet of his room determines diphtheria or not. The modern Doctor of Medicine is or should be first a sanitarian, and best understands the embarrassments to the family of the inexorable laws attending preventive medicine.

. . . . .

(1901)

THE State Examining Board has had a little trouble—just a little—not nearly so much as was expected. It seems strange that those whom the law is supposed to benefit should make trouble. The other fellow has a right to, but the man who has a diploma or other legal evidence of qualification don't help matters any by making a fuss. It isn't wise to stir up a legal muss over a law which is so new. If strained too hard it might break. Let us not see any flaws in it until they are shown to us. We have all worked hard for a law and we have got something—let us keep it till we can get a better one. (1901)

Malaria

GEORGE A. BOYD, M.D., Baldwin

"Malaria: a febrile disease due to poisonous emanations from damp ground; or more correctly the emanations themselves." This definition, taken from a medical dictionary published in 1900, defines the disease as it was understood in 1880. Our knowledge of the disease is now almost complete, and a brief summary of that knowledge will help to dispel some of the old notions that will cling about us. While explaining the disease it brings us to the larger problem of prophylaxis, as is the case with all understood diseases.

Malaria is produced by an animal parasite (discovered by Laveran 1880) belonging to the class protozoa, order sporozoa suborder hæmosporidia. It is a true animal cell with nucleus, nucleolus and cytoplasm. It has the essential vital properties of nutrition, growth and reproduction. It is capable of reproducing itself for a number of generations by fission which is nuclear division, the divided nuclei collecting the old protoplasm about them separate it into as many nearly equal parts as there are nuclei. The cell finally loses the power of selfreproduction and some of the cells (microgametocyte) become male cells (spermatozoa, or microgametes) while others (macrogametocytes) become females (ova or macrogametes) these two cells unite after the general type of union of spermatozoa and ova and form a new cell (zygote) requiring so far as we know a new environment before it completes its development. When taken into the stomach of a mosquito this fertilized cell, formed by the union of spermatozoa (microgamete) and the ova (macrogamete) and now called a zygote, enlarges, its nucleus increases in size, and the chromatin divides into many minute masses. These chromatic threads soon arrange the protoplasm of the cell about themselves forming a great number of small cells within the parent cell. The parent cell now 10 times its original size and full of as many as 10,000 new cells (sporablasts) is called a sporocyst.

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(1901)

Railway Injuries

WILLIAM B. MEAD, M.D., Oberlin

Railway surgery is of recent date. In reading the history and literature of surgery, I find no noted author on this subject. D. Hayes Agnes, Frank Hamilton and Dr. Brainard, gave other specialties to the world. Moses Gunn, under whose inspiring lectures I have often been moved, made no special mention of this branch of surgery. The dangers attending locomotion of any kind are apparent; but railway travel is especially hazardous and means to lessen the danger or ameliorate the injuries ensuing therefrom, are of the highest importance.

The progress of modern surgery is a marvel. One hundred years ago the most progressive physician would have declared it to be a visionary and vain thing to attempt to keep a man alive with a broken neck or fractured spine; to give hearing to ears deaf since childhood; to enable persons born blind, to read and realize the finest distinction of color, and those born dumb, to speak. To straighten the figure of the hunch back, which would have made Richard III more sightly in the eyes of Queen Anne; to change the whole contour of the face and give comeliness to those born in deformity; or to perform a laparotomy using the bistoury and the needle in the vital regions of the human body without causing death or giving pain. It is then but natural that railway surgery should, to some extent, feel the impetus given to all branches of surgery.

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(1901)

UNLESS another spell of serious hot weather interferes we expect to have some letters from the various departments of the Society. Doctors, like other people, object to doing any more than is absolutely necessary when the thermometer is over 100° in the shade. The President has promised to make some suggestions for the benefit of the society. We hope however that every member will consider these pages open to him and use them accordingly. That is what the JOURNAL is published for and we don't care to do any more of the writing than we can help. (1901)

The Present Status of the Serum Therapy

H. B. HOGEBOOM, M.D., Topeka

Due to the rapid advancement of the science of bacteriology together with the aid of the microscope, we know that certain diseases such as diphtheria, typhoid fever, pneumonia, scarlet fever, tetanus, and others, are caused from certain specific micro-organisms, or these particular bacilli throw off toxine which is the immediate cause. Through this valuable discovery certain preparations known as serum, or antitoxine, have been introduced as a preventive or immunization against these special diseases.

While all the diseases that I have mentioned are caused by a specific micro-organism, very few of these bacilli throw off their own toxine that have been discovered. However, this is not true with diphtheria, for we know that this disease is caused by the Klebs Loeffler bacilli, or the toxine thereof. We do not to-day consider that diphtheria antitoxine is an experiment or an uncertainty, but we regard it as one of the positive advances discovered in the practice of medicine, we no longer look upon this disease as one of the most fatal of all the infectious and contagious diseases for we are acquainted with its history as well as its highly contagious nature; and by the use of antitoxine, together with isolation, we no longer fear this dread disease. Thus we have diminished by the use of this valuable remedy, a disease at one time with a mortality of 40 per cent, to a mild disease of less than 8 per cent.

. . . . .

After the administration of the antitoxine it is wonderful to note the changes produced in the patient. Within twenty-four to thirty-six hours the swelling diminishes, temperature falls, membrane begins to disappear, pulse becomes slower and stronger, and in all the patient's general condition is much improved. The second injection is only necessary upon the recurrence of the symptoms, or as the severity of the case demands. While some have argued that the nervous system is impaired, and others have attributed death from the use of antitoxine, I have never noticed any bad result upon the nervous system, but on the contrary, believe it protects against diphtheritic paralysis. As to death being attributed to antitoxine, Dr. A. Seibert and Dr. F. Schwizer, of New York, after making numerous experiments upon guinea pigs, concluded as follows:

"First. That antitoxine does not seem to be capable of causing threatening symptoms and speedy death, even when introduced quickly into the blood current in very large doses.

"Second. The carbolic acid used in preserving the serum, they found must be in such a weak solution as to be entirely unable to cause the characteristic convulsions, or symptoms, in fatal cases. And the fact guinea pigs and other animals survive even larger doses of the acid proves that the acid could not have caused the death.

"Third. From their experience they had found that when small quantities of air injected into the body did produce severe disturbances and ultimate cessation of breathing in the animal, and these symptoms being analogous to those present in fatal cases attributed to the serum, these gentlemen concluded that death was caused by the introduction of air in a punctured cutaneous vein."

Out of 3,628 cases investigated by a committee composed of Doctors W. P. Northup, Hoyt, Dryer, and Adams, for the benefit of the American Paediatric Society, they only found three cases that could be attributed to the antitoxine, and these few cases it was not clearly proven that death was caused by the serum.

. . . . .

The amount of antitoxine to be administered varies in various cases, and I think should be governed by the character or severity of the disease, together with the age of the patient. Children under one year, where the membrane is confined to the nasal cavity, will tolerate 1000 to 2000 units. Older patients will tolerate a much larger dose, and in all cases injections should be repeated in from twelve to thirty-six hours as the recurrence of the symptoms demands, or if the symptoms do not subside.

While no secrecy exists in the manufacture of the antitoxine and all have given satisfactory and favorable results, it is essential and of the utmost importance that the highest quality may be maintained and not the greatest quantity with the cheapest process. This has not been my experience with vaccination, and I attribute the dissatisfaction and the unfavorable results, that no doubt some of you have experienced, to quantity and not quality. . . .

In regard to the progress, or advantages, in the antitoxine treatment of other diseases, other than diphtheria and tetanus, very few favorable results have been accomplished, and in conclusion will say that we are anxiously awaiting the day when we will have a successful antitoxine for every disease caused by a specific micro-organism, and especially do I allude to those dreadful diseases, carcinoma and tuberculosis. (1901)

[This is the earliest article written by a member of the Society who is still living.—Ed.]

The Business Side of Medicine

J. E. MINNEY, M.D., Topeka

. . . . . .

In summing up the whole matter we believe:

That the business side of medicine is as important to the physician as the professional side.

That every physician has the financial ability to gain a competence and can do so by observing the following rules:

1. Collect every dollar possible at the time it is earned.
2. Make prompt collections of all accounts or know as soon as possible if they are worth looking after.
3. The physician must live within his income.
4. Save something from the earnings each month or year.
5. He should inform himself and make his own investments.
6. These investments should be made at home and be under his own supervision.
7. He should not buy of another through friendship for the chances are it will end in disaster to friendship and money.
8. The property should be examined before buying as carefully as the patient is examined before diagnosing the case and prescribing and his success will be as sure in the one case as in the other.
9. He should not sign his name to another man's note unless, First, he is able to pay the note; and Second, he is willing to pay it. (1902)

Smallpox

W. L. WARRINER, M.D., Topeka

. . . I wish to say a few words on the threadbare subject of smallpox. What I may say will in no way reflect on any member here as I have the greatest respect for every member of the society.

. . . . . .

Soon after the Spanish American War there was spread throughout this country an epidemic of smallpox. It was not Cuban smallpox nor Cuban chickenpox, nor Cuban itch nor chickenpox but plain smallpox or variola. To be sure there were some cases of chickenpox prevalent at the same time as there always have been, especially among children. I cannot understand how any physician of fair intelligence can make a mistake in the diagnosis of a well marked case of either variola or varicella as has been so frequently done of late. Of course in early stages of either disease it may be difficult to decide but I am speaking of well developed cases. I was hasty enough to decide that a man with measles was developing smallpox which caused considerable trouble.

. . . . . .

Now as to the difference on inspection. Chickenpox is characterized by the eruption of vesicles containing nothing but water or serum, it might be called; no pus being ever found in them and no pitting or umbilication present. Smallpox vesicles on the other hand may at first give the appearances of being but watery vesicles but later invariably contain pus and most of them become umbilicated. These differences I have never failed to find. . . .

Chickenpox vesicles contain no pus and collapse on pricking. Smallpox pustules do contain pus and do not collapse on picking. Chickenpox vesicles are not umbilicated while the majority of small pox pustules do become umbilicated. Have been interested in discussion of vaccination. I am a firm believer in vaccination. . . .

An instance in the first year of my practice in Ft. Scott, where I was fortunate enough to have had a large experience with smallpox, convinced me of the efficacy of vaccination.

Being called to see Mrs. K., a patient with a high fever and suspecting smallpox owing to the prevalence of an epidemic at that time, I immediately vaccinated the husband and little boy. At the proper time a vesicle appeared on the boy's arm but the father's did not take and in about ten days from the wife's first high fever he came down with smallpox. There the father lay with confluent smallpox nearly dead with the disease and scarred for life while the boy played about the same room perfectly well and with but one pustule on the arm, the vaccine pustule or vesicle.

I believe the present mildness of the disease is due to sanitary means and vaccination in the past. . . . (1902)

[This is the earliest article written by a member of the Society who is still in practice.—Ed.]

Response to Address of Welcome

J. W. RYAN, M.D., Coffeyville

Mr. President, Ladies and Gentlemen: I must confess that it was my intention when I came here this evening, to address you at some length, but regret to say that serious indisposition will necessitate the abbreviating of my remarks somewhat—a circumstance which will probably redound to my credit, and perhaps very much to your relief and advantage.

This is a time and place of my life at which I regret that I do not possess the silver-tongued oratory of the master minds of "ye olden time," in order that I might be enabled to fittingly respond to these kind words of welcome. However, in the name of the Kansas Medical Society I desire to thank you for your gracious words of welcome spoken here tonight. We needed no assurance, however, that this historic city would welcome us in the spirit of true hospitality—for *noblesse oblige*. We are glad to be your guests; glad to meet you within the shades of the grandest institution in the West—for much of the boasted enlightenment of the great commonwealth of Kansas streams from this radiant point.

We have come to your town, unheralded by the fanfare of trumpets or the roll of drums, for the Kansas doctor is a proverbially modest man. He is a "Weelum McLure" whom the genius of Ian McLaren has made human forevermore. He is fully abreast of the times in matters medical; he is a diligent student of the master writers of our craft, and in the shining pathway of their pens he finds his inspiration. He is familiar with all the recent developments in hæmology—and, under ordinary circumstances, is able to distinguish between malarial poisoning and *spina bifida*, without the blood count! He claims no priority in the matter of spinal anesthesia, has invented no new serum, and, so far as I know, has placed no new speculum on the market! He is, withal, a resourceful man, who sees his day afar off, and is glad. He brings to his work a mind stored with the great and fundamental truths of Nature; and the laws which govern her operations; a deep and reverent sense of duty in his ministry to the children of men. Such are the men who compose the great Society that meets within your gates tonight; men whose professional lives are governed by a rule of conduct of marvelous simplicity, comprehensiveness and elevation of spirit; a rule that was framed in transcendent wisdom by the great Father of medicine, and which has been the heritage of all the good and great who have followed in his footsteps. In the name of this great fraternity, I again thank you for the generous liberality of your welcome.

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The heart seems to be about the only organ left to the general practitioner. In the language of Shattack: "I am not so sure that this organ will not soon be attacked, and we may hear of suturing the mitral valves." Some time ago I read the report of a Southern surgeon, who, for a stab wound of the chest in the region of the heart, believing from the symptoms that the heart had been injured, he deliberately removed a section of the 5th, 6th and 7th ribs, opened the pericardium and sutured an incised wound of the heart, the patient recovering. Neither the physician nor the surgeon can afford to confine himself to his special studies alone. There should be more frequent meetings on a common platform for the discussion of certain subjects or plans of mutual interest, they should consult oftener and be more in touch; the too often statement made by the physician, "Oh, he is an operator not a diagnostician," then would not be heard so often. It likely is true that the active surgeon is sometimes apparently more honored, gets a larger fee for what he attempts, than he actually deserves. But I feel that if the general practitioner were a little less conservative, if they held more frequent consultations with the surgeon, it would be much better for both. In some way, I do not know just how, the general practitioner should be brought into closer and more intimate relation with the surgeon, this is essential. The morbid changes which we term disease are not entities. Is this not equally true of some surgical conditions? Success in their treatment requires the combined efforts of both.

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(1902)

THE Sunday edition of one of the leading daily papers in this vicinity usually displays a large picture of a doctor or two. Now, the question is, how do these pictures get into the daily press? Are they printed without the knowledge of the doctor or are they put in with his knowledge and paid for? Don't we howl furiously about the quacks doing this kind of advertising and point with pride to the Code? Verily, consistency, thou art a jewel of much fineness. (1902)

SO-CALLED health foods are multiplying at a rapid rate. One gentleman claims that he has invented one of the best. He was asked why he didn't put it on the market; he replied that all the good names were taken. Another gentleman met a friend on the street and noticed that he looked rather badly and inquired the cause. The answer came, "O, I suppose I have been eating too much health food." He no doubt told the truth. (1902)

[From By-Laws Adopted 1902]

Article X.

Section 1. A journal, known as THE JOURNAL OF THE KANSAS MEDICAL SOCIETY shall be published at least once each month and a copy thereof mailed to each member of the Society. There shall be set aside one dollar of the annual dues paid by each member of this Society for the purpose of paying the subscription price for each member of this Society and the President and Secretary of this Society shall draw warrants in the usual manner for the purpose of paying for such journal.

Sec. 2. The Editor shall collect all moneys due the JOURNAL on account of advertising and shall remit the same to the Treasurer. All expense accounts for the publication of the JOURNAL shall be endorsed by the Editor and shall be paid by warrants drawn in the usual manner signed by the President and attested by the Recording Secretary. (1902)

IN spite of the excellent results which have been reported from those using the X-ray in the treatment of malignant growths, there are features appearing which may greatly discourage its very general or extended application. Severe disturbances of nutrition, possibly due to absorption of the toxines resulting from the degeneration of the growth. At any rate death has resulted from the conditions following the use of the X-ray in some cases, not from the effects of the growth, but the secondary effects growing out the change produced by the X-ray. (1902)

[From Proceedings of 1902 Meeting]

. . . Dr. May introduced some resolutions which have already been adopted by many State Societies, "The Kyger Resolutions for the Abolition of the Newspaper Publication of Personal Medical Advertisements," which are as follows:

"WHEREAS, It can and has been shown, by ample statistics, that the American race is rapidly decreasing in its birth rate, thereby threatening ultimate and complete decadence of the race, and

"WHEREAS, Such decadence has become so apparent that it should claim the serious attention of those of influence and power to in any degree lessen this evil, and

"WHEREAS, Without a special effort to investigate, it must have been observed by the most indifferent with what flagrant violation of all sense of delicacy the public press gives place to advertisements of nostrums and means intended to prevent or cut short pregnancy, these advertisements appearing in a column of the paper set apart for such purpose under the name of 'PERSONAL MEDICAL ADVERTISEMENTS,' and referred to as 'Guarantees,' 'Sure Relief,' 'Sure Prevention,' etc., occupying in some Sunday editions of reputable papers as much as two columns destined to fall into the hands of all classes, and

"WHEREAS, We recognize the press as a most potent factor in the education of the masses: be it

"*Resolved*, by the Academy of Medicine of Kansas City, Mo., that we respectively recommend that a censorship over the public press should be exercised to the end of correcting such practice of publishing advertisements as those referred to in our whereases. Be it further

"*Resolved*, That it should be deemed of sufficient moment for the attention of the Post Office Department of the United States of America restricting or prohibiting the distribution of such papers, periodicals or magazines through the United States mail if they continue to so prostitute their columns with such matter." (1902)

THERE are some things about the medical law that seem a little unfair. According to the interpretation of the law as we understand it is held by the Board, a four-year course in medicine is the essential qualification for entrance to the examinations held by the Board. In lieu of one year of the four required, five or more years of practice will be accepted, but in no case will a course of two years be accepted as sufficient. A great many of the most prominent men in the medical profession are two-year graduates. Are these to be excluded from taking the examination if they so desire? There are good reasons for making these laws strict, but there are also good reasons for making them sufficiently elastic to admit those who are thoroughly qualified even though they may have been unfortunate enough to have graduated under a two-year requirement. Is not a long period of persistent study and experience equal to either two of the college years now required? (1902)

Medical Registration

G. F. JOHNSTON, M.D., Lakin

Medical registration is part and parcel of the methods and machinery of civilization. It has a very ancient history; according to Aristotle, the old Egyptians had a species of registration, by which, besides the protection of society from the ravages and outrages of quacks and frauds, they provided that, "doctors should not demand fees on a foreign journey, or on military service, when such patients were treated free of expense and the poor were treated gratis," by reason of the doctors being registered and carried on the public pay rolls. In the time of Hippocrates physicians were registered and the registration embraced a far more stately and formal ceremony than does any modern registration, notwithstanding our Kansas registration is bitterly complained of as being bound round with far too much red tape. Each registered physician in Hippocrates' time had to take and subscribe to the celebrated Hippocratic oath, a thing some modern doctors might do with advantage. All of ancient, medieval and modern medicine when studied in the light of history, shows some form of registration, though as variant and variable as March winds. But in all their various forms there was exhibited little or nothing of the most modern ideas and purposes of registration. . . . Now it is intended to establish a broad and universal standard of qualification for all practitioners, and to protect the lives and health of the entire body of citizenship. There is now a general and widespread movement in all civilized countries to execute the first duty of government, namely: to protect life and health in the citizen in return for the surrender of the citizen's inalienable right to life and health, to the keeping and care of the government. . . . The quacks and medical mountebanks in all ages have raised a loud clamor against all method of registration with qualification attachments, on the ground of taking away the personal liberty and so-called vested rights of the unqualified. In our own state registration, the whole body of complaint has been made by the unqualified. They have protested loud and long both personally and by paid attorneys against the restriction of their liberty to do as they pleased and to be employed by whomsoever might choose to do so, basing their spurious arguments on the ground that a vested right was being taken away, which could not be done constitutionally. . . . The first and supreme duty of government is to protect the citizen in everything that goes to constitute the general welfare of society; and the duty of government is as great in the matter of protecting its citizens against all health destroying agencies, as against murder, theft and arson. And that protection lies largely in instituting such a medical and sanitary regime as shall give the individual the benefit of all science, all art, all wisdom in the betterment of all the conditions of life and health. . . .

. . . when Kansas opened its eyes on the 22d of March, 1901, with a respectable medical registration law among its statutes it found the state overrun with the medical remainder from nearly all other states. It had become, almost unawares, the dumping ground for the professional refuse from nearly every state and country on the planet. We had not only our quota of educated and reputable physicians, but we had everybody else's quota of disreputable and disqualified mortals calling themselves physicians.

. . . If they had succeeded in palming themselves off on the public as "doctors" for seven years they were allowed to remain in practice, no matter how ignorant and unlettered they might be, no matter if they could by no possibility obtain a license to teach the alphabet and spelling book in our country schools, they still could obtain a license to practice the loftiest and most sacred calling among men, and the one naturally requiring the highest degree of erudition and wisdom known to the human race. The result was that over a quarter of a thousand licenses had by law to be granted to men who never entered a medical school for an hour's study. . . . The board has to deal with "all sorts and conditions of men," from the class just mentioned up to the most erudite university graduates. We have had not only the densely ignorant but the desperately dogmatic and malevolent kinds of men to deal with; also cunning, crafty, unscrupulous and downright dishonest characters. And we have also had a large contingent of highminded, well educated and honorable men as applicants. We have had the cautious and the careless men who looked to it scrupulously that every detail of the legal requirements for registration were complied with, and men who never yet have furnished acceptable credentials. . . . Bribes have been freely offered for unmerited licenses, while others have resorted to threats and storms of abuse when their demands were not granted. Lawyers by the score have been sent up to persuade or bully the board according to the temper or whim of the rejectees. And when one of these doctors was put in jail for practicing without a license, he appealed to the supreme court as was his right, but that court recently rendered its judgment sustaining the constitutionality of the law. As that law stands it is one of the best in the United States. Its standard of

requirement is as high as that of almost any state in the union. It allows the registration of only four year graduates or examinees who have taken four courses of medical instruction, the board having authority to make the examination as thorough and rigid as equity and good conscience will allow. And when the old crop of ignorant and incompetent practitioners dies off or moves away, Kansas will be one of the best regulated states in the union.

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Wherever our flag floats, there we have at least a fair form of medical registration and an honorable attempt at ideal standards of requirements. Hence the unification of methods and standards cannot be long delayed. In fifty years more there will be little, if anything, left to be engrafted on our system. That seems, perhaps, a long time to wait for a medical millenium, but other great movements of civilization and civic reforms have taken a much longer time. We can afford to work and wait in so good a cause. (1902)

Diphtheria

WILLIAM F. SAWHILL, M.D., Concordia

Very few diseases as we now know them have been described by the ancients, but some have existed from the most "ancient times." Diphtheria is one of these, and in writing about it we are only repeating some of the things that were said thousands of years since. Aretaeus, of Cappadocia, is said to have given the first good description of the disease under the name of "Syriae Ulcer." It was known at one time as the Egyptian sore throat, having existed in ancient Egypt. It has been called "Anginae Gangrenosa," "Morbus Suffocans vel Strangulatorious," and various other names. . . . Writers have stated that it was a rare disease in the United States until the latter part of the nineteenth century; but it has always existed, and was well described by a writer in New England in 1659, where a number of children are said to have died from "bladders in the windpipe." Diphtheria with a mild beginning has maintained a hold, gradually increased, and until recently was perhaps the most dreaded disease. The writer remembers an epidemic during his medical student days that decimated almost entire families. . . . We are now able to say dogmatically that diphtheria is an acute contagious disease caused by the Klebs-Loeffler bacillus. Anatomically there is a diphtheritic inflammation of the mucous membrane of the upper air passages and the pharynx. There is irregular fever, ranging from very high to absence or below normal. Great prostration is present, especially in the severe forms. Frequently we find albuminuria, croupous laryngitis, cardiac failure, and lastly paralysis of the throat. It is endemic and often epidemic. . . . The membrane in the inflammation of true diphtheria is a fibrinous exudate, . . . in the severer forms the membrane infiltrates all the layers of the mucosa with a tendency to produce necrosis of all mucosa and even the sub-mucosa. . . . The membrane is a grayish white color, about the color of buckwheat flour; as it becomes older it gets darker, sometimes becoming yellow or a dark brown. In some severe cases it becomes gangrenous with an offensive brownish secretion. The membrane begins on the tonsils as a rule in the form of small yellow patches; it soon spreads to the soft palate and arches, and the pharyngeal wall. . . .

The bacillus is found in the membrane and in the mucous structures immediately surrounding it. . . . The period of incubation is from two or three to ten days with the usual exceptions, as in the malignant epidemics it may not be over twelve hours. The disease comes on insidiously; the child feels weary—may be chilly and cold, head, back and limbs ache; may be some difficulty in swallowing, usually not much if any pain in the throat—thus differing from tonsillitis, follicular pharyngitis and kindred affections. Appetite is lost. When called to see a child with above symptoms, a physician will suspect diphtheria, and examination will often disclose the fact that the membrane already covers the entire visible portion of the throat. . . . These symptoms all vary from the mild form, where the symptoms are so slight as to make the diagnosis doubtful, to the malignant with all above symptoms in an aggravated form, including a rapid, wavy weak pulse, cold clammy skin, dry brown tremulous tongue, bleeding of mucous surfaces, and petechiæ under the skin. . . . In the beginning of the disease diagnosis may be uncertain except by bacteriological examination. The finding of the Klebs-Loeffler bacilli settles the doubt. . . . When we have several cases of supposed diphtheria in a mild form, it is important that a correct diagnosis be made, and that should be by a bacteriologist.

In the severe cases diagnosis is not difficult. The prognosis of diphtheria has wonderfully improved

since the use of antitoxin. Before this time the mortality was enormous, the worst form being the laryngeal. The bacilli in some epidemics must be very malignant, so poisonous as to cause rapid destruction of life, the strong and healthy succumbing as rapidly as the weaker. . . . In diphtheria after centuries of experience practically no progress had been made in the treatment until recently, when perhaps the greatest discovery of a pure scientific character in the whole history of medicine has been made, excepting only vaccination and that was more of an accident. Antitoxin has undoubtedly reduced the mortality of diphtheria to so great an extent that we are obliged to give it the first place and we should not waste valuable time nor risk life by delay in its use. Statistics are so favorable to its use that anyone who doubts should read.

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These statistics correspond closely with those observed elsewhere and seem a great argument in favor of antitoxin. It is doubtful if specifics exist in therapeutics at present but it seems we are certainly nearing that point, and yet some physicians and editors of medical journals oppose antitoxin. Some oppose vaccination. Why? They haven't investigated the subjects thoroughly. They make assertions but don't give statistics, they haven't studied reliable statistics from reliable hospitals and reliable physicians.

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(1902)

Ethics and State Legislation Controlling the Qualifications to Practice Medicine

GEORGE A. BOYD, M.D., Baldwin

. . . my purpose is to speak of ethics as it pertains to legislation affecting the practice of medicine.

As in individual evolution there is a reciprocal relation between the various part of the body so in society there is a like relation existing between its various parts. Difference of parts and functions necessarily postulates co-operation whether in individual or social life. The relative influence of any function is determined by its influence upon the whole organism and the obligation of the function. . . . In social life by a division of labor those performing the same function in society form aggregates which through their reciprocal relations to other groups become inextricably bound together yet always retaining a definite value. As the function of any group of workers in society varies so the obligations of society to the group vary.

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Ethics is the science which relates these parts according to their true values. Since all conduct is an expression of function, ethics is usually thought of from the side of conduct. Legislation defines by statute the relations existing in society between individuals, between individuals and the state, between groups of individuals, between groups, between the state and groups.

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In the recent past many new and important facts have enormously increased the usefulness of the medical profession. One shudders to think of the calamity that would come to the nation, state or city bereft of the protection which the group of medical workers has brought to it within the last thirty years. While the medical profession is not as great as its creator, our present civilization, it constitutes one of its most vital parts; and the individual unit, the doctor, whether he be teacher or practitioner, must attain a high degree of proficiency before he can bring to society the protection which the facts of the science of medicine as it exists today, places within his reach. Throughout the civilized world society assumes this protection as a matter of fact and acts upon the assumption. The citizen no longer fears epidemics unless he is uninformed or mistrusts his health officers. . . . These laws are the expression of an evolution already a fact. As soon as they find expression in a statute they become forces for or against our future, and are just subjects of our most careful criticism. . . .

Since our own law, passed in March 1901, has as its purpose the same end and is on the same general plan, and under similar social conditions as most of the other state laws recently passed, an analysis of its provisions and their validity according to the concept of ethics already mentioned will serve at least to bring before you our relations to society as defined by our legislatures. Chap. 99, Art. 9, Sec. 6669, provides for a board of examination and registration. . . .

Sec. 6,670, Art. 9, Chap. 99, defines the qualifications necessary to practice. For physicians already in

practice it gives four months from the time of the passage of the law to register by presentation and verification of their diplomas.

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Section 6671 defines the procedure and requirements for obtaining a license by those already engaged in the study of medicine at the time of the passage of the law and by those who after the passage of the law take up the study of medicine.

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It is astounding with what pertinacity dogma and pretense perpetuate themselves, and how the wolf can hide in sheep's clothing. If you were to ask the author of the above law to write a law to perpetuate dogma and give it the state's seal of authority he would only need add this one, "*provided*, That all persons engaged in the study of the science of medicine independent of dogma are barred from the provisions of this act!"

This strips the wolf of its sheep's clothing and leaves us to face our error and our shame; for it is our own garment in which we have so securely ensconced the animal that gnaws at the heart of science. Not alone in our own state but in all the states the recent medical laws give to dogma the same rights that they do to fact. The science of medicine includes all the known relations of cause and effect, their useful application, the facts of physics, chemistry, histology, anatomy, physiology and pathology of the human body. . . .

The greatest misfortune of our recent legislation is that it not only provides for members of each school on the board but also a different basis for the same function is recognized. Certainly the same questions of fact should have been made the basis of qualification allowing any school to ask such questions as the state of our knowledge might warrant. To attend an examination when homœopathic questions, allopathic questions and eclectic questions are made the basis of your fitness to practice medicine is an anachronism no less humiliating than a state teacher's examination when the questions in geography are arranged according to the "flat" or the "round" system. I am not unmindful of the forces which have brought about these results. Political methods are as open to men with wrong purposes as to those whose cause is right. . . . The regular profession having but little of the breath of science breathed into its every part has not seen the situation with clearness enough to meet the question from the high plane of equal privileges to all and special privileges to none.

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Medical education does not differ from any other education in its rudiments; and our public schools furnish that. A graduate of our public high school is competent to understand all but the most technical facts of scientific medicine. His education has been at least fairly carefully supervised. Now let the State provide that his professional education shall be as carefully supervised, and eliminate in the second year all students who show incompetency. First, provide that no medical school shall have a charter until it has furnished competent instructors, laboratories and equipment to teach physics, chemistry, anatomy, physiology, histology, pathology, bacteriology, materia medica and therapeutics and surgery, and then let the record of the daily work done by the student be the guide as to his ability to understand and to accomplish purposeful ends. Require a certain amount of this work—enough of it to demonstrate that the worker is competent—then give him a license to practice medicine. Put this supervision into the hands of a representative of each school of medicine elected by their state societies and to the teachers who have the daily supervision of the students' work. Examinations are an abomination, and greatly hamper the power to think and observe by the effort to remember. By such a stand we can eliminate the politician, place all on an equality, and provide for a real education consistent with the importance of our function in social evolution. (1903)

The display of vegetables, fruit and other eatables unprotected from dust of the streets by numbers of grocery men, which is in direct violation of the law, is as filthy as it is disease breeding. How easy it is for bacteria laden debris in blowing about to find itself a resting place upon the food stuffs and then being directly transmitted to the alimentary canal. Is it any wonder that there are so many cases of gastro-intestinal disorders of bacterial origin? It is plain duty of the sanitary officers to protect the communities from this danger, and that at once, without procrastination. (1908)

Our Journal

Some of our exchanges have been discussing the need and the field of state society journals. We have glanced over these editorials sufficiently to note that even non-society physicians admit the need of such publications. To us, however, the need seems twofold. First, the society journal is needed to uphold high standards of living and thinking among physicians. It can do this, because its purpose is not financial profit. It can be independent of degrading money influences either from nostrum vendors or self aggrandizing physicians. For these reasons the society journal may hold nearer the ideal than its private competitor. Secondly, the society journal is needed to present the matter of organization to the members of the profession within its district. Without aggressive effort successful organization is impossible, and one of the most potent factors in any campaign is printer's ink. Therefore the society journal is needed to keep before physicians their mutual obligations and common dangers.

That the first need is real is to be seen whenever one looks over the mass of "literature" that comes to the physician's desk under the guise of medical journals. Probably the greatest evil is that of running as original, articles in fulsome praise of some secret and proprietary concoction. Next in order is the advocacy of ignoble standards wherein money making is made paramount, and self-aggrandizement is praised. The prevalence of these evils makes necessary a journal as independent of foreign influence as the society journal is.

The field of the society journal is apparent from the foregoing discussion of the need. Our journal, as a type of the society journal, should publish only the best quality of matter; that is, the best that the physicians of the state can produce. This should include the results of study and research, as well as those of personal experience and observation. It should be the medium of exchange for ideas both on the practice and science of medicine and also the economics of the physician's life. This means that the individual practitioners should discuss freely in its columns their troubles as well as their successes. . . .

To carry out the above work will necessitate that we expend fully the one dollar per member appropriated by our constitution. Of course if ours were the only journal in the state it would be more nearly self-supporting, and we were very much pleased the other day to receive a letter from Dr. Purves of the *Wichita Journal* advocating the consolidation of three Kansas medical journals. The consolidation could occur only by making the resulting journal absolutely the property of our society and free from all outside influence. But until such consolidation is effected we must expect to pay for our journal just what we want it to be. Your editor has spent much time and thought and work (without salary) in looking up acceptable advertisers, but he feels that to deal successfully with advertisers he must be independent of them. Therefore he will go forward on the assumption that what is wanted is a good journal, rather than a cheap journal. The growing number of letters from his colleagues has strengthened his hands and he now feels that if he can only keep the JOURNAL growing until the majority of his fellow members awake to the fact that they have a local journal devoted to their interest. (1903)

The time is not far distant when this JOURNAL will eliminate its questionable advertising and follow the recommendations of the Council of Pharmacy of the American Medical Association. To compensate for the loss which will be sustained by this procedure, every member of our society should interest himself in helping to get reputable medical colleges, hospitals, sanitariums, medical book publishers, ethical pharmaceutical manufacturers, surgical instrument makers, etc., to advertise in its columns. You are stockholders in this JOURNAL and, as such, are interested in its welfare. By helping just a little, it will not be long until the JOURNAL can support itself by the advertising alone. (1908)

Unscrupulous Advertising

Perversion of the U. S. Mails

The boldest attempt at deceptive and fraudulent advertising of which we have personal knowledge recently came under our observation.

A gentleman purporting to be the representative of the Robinson Medicine Co., of Topeka, Kansas, called about six weeks ago at the office of the undersigned to lay before them the extraordinary virtues of a certain compound which he affirmed in a period of ten years had not failed to cure every case of diphtheria, tonsillitis, bronchitis, cankered sore throat and mouth, catarrh, hives, eczema, piles, earache, toothache, fresh cuts, burns, galls, scalds, pimples, warts, corns, bunions, syphilitic ulcers, running sores and all kindred diseases.

We were not interested as medical men in his statements. They were illiterate, unscientific, asinine. They were made with such a flagrant disregard of truth that our interest in the historical Ananias and Sapphira soon waned to be supplanted by a greater interest in this latter day monumental liar. History records that Ananias and Sapphira were struck dead for their sins. When this representative of the Robinson Medicine Company, and perhaps the medicine company itself, get their just deserts, we will read of the avenger having dealt similarly with them.

Before the above mentioned representative of the Robinson Medicine Company took leave of the undersigned, he handed each an ounce vial of medicine labeled as follows: "Anti-diphtheria for diphtheria and all throat diseases. Dose—three drops twice a day for two days. Swab to remove membrane. Never shake the bottle. Price $2.50 per ounce."

These bottles are yet in our possession with seals unbroken just as they were given us. The statement that we endorse and recommend these remedies is absolutely false. We know nothing of their component parts or effects, consequently could not use or endorse them. We have faith, however, in their utter inefficiency in curing the diseases named, and the educated physician who would add such compounds to his armamentarium must indeed be weak and gullible. (1904)

Constitution

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Article II.—Purposes of the Society

The purpose of this Society shall be to federate and bring into one compact organization the entire medical profession of the State of Kansas, and to unite with similar societies of other states to form the American Medical Association: to extend medical knowledge and advance medical science; to elevate the standard of medical education, and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of state medicine, so that the profession shall become more capable and honorable within itself, and more useful to the public, in the prevention and cure of disease, and in prolonging and adding comfort to life.

Article III.—Component Societies

Component Societies shall consist of those county medical societies which hold charters from this society.

Article IV.—Composition of the Society

SECTION 1. This Society shall consist of members, delegates and guests.

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(1904)

Business Chances

For Sale Cheap—One absolutely new Butler buggy, rubber tired, equipped with rain-or-shine top. This buggy has never been out of the shop. Write editor. (1909)

The Value of the Exact Determination of Blood Pressure in General Practice

O. P. DAVIS, A.B., M.D., Topeka

It is very desirable, for many ends, diagnostic, prognostic and therapeutic, accurately to appraise the vital activities of the body. By so doing, much that portends may be anticipated and sometimes averted or arrested in its course; or even if a dreaded event becomes inevitable, its shock may perhaps be mitigated and rendered less dreadful.

It is not enough that the practitioner should trust to his unaided senses for such important data. Such sources of information are, in the best and most astute observers, far from infallible. No physician would rely upon his temperature sense in the matter of estimating pyrexia. He no longer is content with placing his hand on a flushed brow and *supposing* the patient is feverish. Nor would the modern clinician, however skilled, venture to pronounce upon the character or degree of an anæmia on a basis of a mere inspection of the skin. The senses of touch and sight are not appreciative of small degrees of variation in their respective fields, especially when the varying objects observed are widely separated in place or time. This fact has given rise to the necessity of using instrumental aids to observation, with fixed standards and scales of measurement, wherever accurate determinations are desirable for comparison and preservation.

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. . . It is perhaps sufficient for the purposes of the present paper to briefly summarize the matter, reserving for another paper at some future time some detailed results of more extended personal observations than opportunity has afforded up to this date.

The normal maximum blood pressure averages, when lying at rest:

For children of 1 to 3 years .	85 to 95 mm.
For children over 3 years ...	95 to 110 mm.
For adult females	115 to 125 mm.
For adult males	125 to 135 mm.

The mean arterial pressure is about three-fourths of the maximum.

A constant pressure of 150 to 160 should be regarded as suspiciously high. Various influences are active in modifying arterial pressure, such as posture, food, sleep, physical and mental work, psychical conditions such as grief, worry, etc. Several readings should be obtained and the average taken.

The high pressures are of special interest on account of being associated with diseases whose most dreaded symptoms are due to excessive strain upon the vessels. In uræmia and arteriosclerosis, pressures of 170 to 240 or more mm. are said to be the rule. In interstitial nephritis a high arterial tension is characteristic, and a lowering of the pressure is usually associated with improvement of the symptoms. In the diagnosis of kidney and other diseases in which the blood pressure is symptomatically changed, the accurate determination by one or the other of these instruments is a valuable aid.

As a prophylactic guide also such determination is of great value for it is very important to have the earliest possible intimation in advance of a break in compensation of affected organs, as in valvular diseases of the heart and in kidney diseases. Timely knowledge may postpone such an unhappy issue.

As a prognostic adjuvant, in acute as well as chronic cases, a series of observations by one or both of these instruments may throw great light on the probable endurance of that most important organ, the heart.

And finally, in a therapeutic regimen, the measurement of the action of drugs or other treatment, given for the effect upon the heart and arterial tension may be noted with advantage.

Nothing is to be said in disparagement of the educated touch and eye and accomplished instincts of the experienced practitioner. Many of the fathers in medicine acquire faculties in perception which seem to border on the supernatural,

> "And old experience doth attain
> To something of prophetic strain."

But they cannot always define or describe their observations, nor can they transmit their acquirements to their successors. And sometimes, even after, they differ among themselves about what they have divined. But the machine or the instrument of precision will seldom lie; and there is no more reason to continue relying on the individual judgment as to the tension and other qualities of the pulse than to be content with guessing that a person has or has not a fever.

And when such simple instruments and technique as are here to be exhibited are available, there is no reason why routine observations of arterial tension should not be practiced by every physician in appropriate cases, and even intrusted to nurses or other attendants, along with the clinical thermometer. (1904)

A New Method of Isolating Microorganisms

M. A. BARBER, M.D., Rosedale

The importance to bacteriology of precise methods of making pure cultures is well illustrated by the history of the researches on anthrax. In 1863 Davaine found that blood of a diseased animal containing the small rods would, when inoculated into another animal, cause the disease anthrax; and he was convinced that the rods, which he recognized as bacteria, were the true cause of the disease. But the objection was made that other substances were inoculated at the same time as the bacteria, and that one could not be sure that it was not some other substance with which the bacteria were merely associated which was the real cause. But when Koch in 1876 isolated the rods by means of cultures on gelatine, cultivated them for many generations outside of the body and showed that generations of the bacteria far removed from the original drop of blood were capable, when inoculated, of causing anthrax, the proof was complete. So in all investigations regarding the relation of microorganisms to disease, fermentation, or any change in organic material, it is of the greatest importance to secure pure cultures of the organism experimented with; for in ascertaining which of the various antecedents of the effect is the necessary one—the cause—it is often essential to try each one of them separately.

One of the first methods of purifying cultures was that employed by Pasteur in his researches on beer. This method, a physiological one, consisted in adding to the mixed culture of yeast plants and bacteria substances such as sugar which favor the growth of yeast, and tartaric or other acids which retard the growth of bacteria. By successful changes of the selective medium and the employment of temperatures which least favor the growth of bacteria, he obtained cultures of yeast free from bacteria. However this method did not secure a pure culture of a single species of yeast plant. In 1878 Lister obtained pure cultures of the lactic bacteria by so diluting a drop of liquid containing the organisms that, according to his calculation, a single drop did not contain more than one individual. Then of a series of flasks of nutrient medium, each inoculated with a drop of the dilution, he concluded that the flasks showing growth contained the progeny of a single cell. But one could not yet be certain that the cultures in these flasks came from one or more than one cell. So in 1882 Hansen devised an improvement on this method, and further, observing carefully his inoculated flasks, he considered only those cultures pure in which the growth began with a single speck in the bottom or on the sides of the flasks. This method, used in isolating yeasts, would not do for many kinds of bacteria, at all events not for the motile ones.

A very great advance was made when, in 1883, Koch published his improved method of isolating by gelatine plates. Organisms were diluted in gelatine in the liquefied state. When colonies appeared in the gelatine subsequently solidified and spread on a sterilized plate, it was assumed that each colony came from an isolated cell. But one could not yet be absolutely sure that such was the case; for a colony might well start from two individuals of different species which were not separated during the dilution. To avoid this difficulty, Hansen, working in 1883 with brewing yeasts, made small gelatine plate cultures on the surface of large cover glasses. These were placed over moist cells and sealed. A single yeast cell, well separated from its neighbors, was selected and its development observed. By this method one could be absolutely sure that the colony obtained came from the development of a single cell, and therefore formed a pure culture.

. . . When the writer of this paper undertook some two years ago the investigation of the individual variations seen among bacteria and yeasts, it was necessary to devise some new method of the selection and isolation of single cells. Such a method was worked out and a description of it is given here.

. . . . .

I generally make selections under a two-thirds or a one-fourth objective with a one inch eye piece, though I have used higher powers successfully. After a little practice very little difficulty is experienced in holding the hand steady enough for this work, especially if it be steadied against the stage of the microscope or supported on a block. I have experimented with mechanical contrivances intended to replace the hand, but have not found them necessary. No great difficulty is met with in acquiring sufficient skill to use the method. Mr. Burrows, one of my students, succeeded in isolating spores of fungi after one hour's practice, and in isolating a yeast after three hours, without having had any previous practice with the method.

When a growth has formed in the droplet, it may be transferred to a test tube directly by means of a long pipette, or by discharging the cells into a drop of medium held in the platinum loop. This drop is then easily transferred to a test tube. I have also transferred the single cell directly to the surface of agar. (1904)

Department of Bacteriology, University of Kansas.

Trachoma, or Granulated Lids

EDW. P. PITTS, M.D., Atchison

The importance of making an early diagnosis, and the prompt institution of proper treatment in cases of trachoma, commonly known as granular lids, cannot be overestimated. By instituting prompt and active treatment, many of the distressing complications and deforming sequelae can be at least mitigated, and often entirely prevented, and the duration of the disease greatly shortened. As it is usually the general practitioner who first sees this affection, I take the liberty of presenting this subject for your consideration.

It is doubtful if any disease is more prevalent; no civilized race being exempt. Amongst the Hebrews, Chinese, Irish and Italians it is especially common, and in Egypt and Arabia it is an exception to find a native with sound eyes. In this middle west, where the population is made up to such a large extent of people of foreign nationality, this disease exists, even in the rural districts, to an alarming degree.

Bad air, over crowding, poor and scanty food and unsanitary surroundings, contribute largely to the transmission of trachoma. It is very probable that a contagium must be added to produce the disease. It becomes epidemic in residential schools, barracks, almshouses, prisons, etc., by transmission.

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Innumerable remedies have been used with varying degrees of success in the treatment of this disease. In the early stage with copius secretion, I find applications of solution of silver nitrate, in strength varying from one to ten grains to the ounce of water, most satisfactory. During the stage of hypertrophy, however, the application of the trachoma forceps, and the unmitigated sulphate of copper crayon, are required to affect a cure. The trachoma forceps, which are either roller or ring, at the discretion of the operator, enable us to express the contents of the trachoma follicles and trachoma granules, as well as to deplete the conjunctival tissue. Following the use of the forceps, the sulphate of copper crayon or a solution of silver nitrate in strength from five to ten grains to the ounce, should be immediately applied. It may be necessary to repeat the application of the forceps several times. The copper crayon should be applied at first twice a day, gradually lessening its frequency as the case improves. The same rule applies to the application of the silver nitrate solutions. Should corneal ulceration be present, this radical plan of treatment must of course be modified. In cases where the treatment just described is too irritating, I frequently resort to the application of a one to five hundred bichloride solution, rubbing same well into the conjunctiva with a cotton swab.

It is generally advisable to precede these treatments by instillations of a solution of cocaine or holocain, thus rendering them much less painful. That class of cases which is attended by symptoms of marked irritation from the first, requires preliminary treatment with cocaine, atropia, and hot applications before the forceps can be used.

In observing the above course of treatment, especially the surgical application of the trachoma forceps, with such variations as each individual case may suggest, this distressing and chronic affection may be permanently cured. (1904)

The Sheep and the Goats. The movement in the profession toward more thorough organization and the raising of our standard in drug giving and education is raising a tremendous row among those who are hurt thereby. If one wishes to learn the real feelings of those who have hitherto fattened on an unorganized and illy trained profession, one has only to read the *American Medical Journalist*. The bitterness and malice shown are appalling. Down in Texas where a state association journal has just been started, the private journals are doing their best to get up a row. In other words, the issue has been joined and the character of each journal is being revealed. We, in Kansas may congratulate ourselves that we have no vested interests to fight an altruistic movement such as ours for organization is.

The *Wichita Medical Journal* was owned by high-class physicians and was therefore willing to unite with the official journal. The same is true of the *Western Medical Journal* of Fort Scott. There is room in Kansas for just one journal and that should be controlled by the organized profession. The platform of this journal is simply to seek the best interests of the Kansas physicians. (1905)

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At Last: We have secured an "open" one fare plus fifty cents rate for the Topeka meeting May 9, 10, and 11. These excursion tickets will be sold May 7-10 inclusive, good for return leaving Topeka until and including May 14. The meetings will be held in the Throop Hotel. Chancellor Strong and the President of the Society will speak on the evening of the 9th. Topeka will be full of delegates and conventions at this time. It will be well, therefore, to order hotel rooms ahead of time. (1906)

The Fluoroscope

ED C. JERMAN, Topeka

One of the most important occasions in x-ray work is the fluoroscope. A fluoroscope consists of a wooden box, usually covered with black cloth and painted black on the inside. At one end of the box is an opening, lined with fur, so constructed, that it may be placed over the eyes so as to exclude all outside light. At the opposite end of the box is a detachable frame covered with a piece of black pasteboard. This pasteboard is coated upon the inner side with glue and before the glue is dry fine barium platino cyanide crystals are sprinkled evenly over it. After drying, the crystals are covered with a coat of varnish. When placed in position before an active tube, all the crystals become fluorescent. The pasteboard offers very little resistance to the x-ray light. If the fluoroscope be placed between the eyes within the field of an active x-ray tube and the hand be placed between the fluoroscope and tube a shadow of the bones of the hand may be plainly seen; the tissues of the hand are transparent to this light while the bones are opaque. The light passes through the tissues and every crystal becomes fluorescent except those that are immediately behind the bones. These remain dark. Consequently we see a true well defined shadow of the bones. The bones are not entirely opaque and a tube may have such penetrating power that the shadow of the bones will scarcely be discernible. The x-ray has the peculiar power of penetrating many substances that are opaque to ordinary light. For instance, wood, clothing, aluminum and paper. The metals are mostly opaque except aluminum. Lead is the most opaque of all substances to the x-ray light. The denser tissues of the body are more opaque than the less dense. For this reason the pulsations of the heart may be clearly seen. The lungs, in a healthy state, are transparent. In tuberculosis and pleurisy the diseased parts can usually be quite clearly outlined, as the diseased parts become more opaque.

The raising and lowering of the diaphragm can be clearly seen or both sides. The organs below the diaphragm cannot be seen with the fluoroscope. The bones of all the extremities can be seen clearly, also the bones of the shoulder. A metallic foreign body can be accurately located anywhere in the extremities, chest or shoulder. A bullet can only be located in the abdomen or pelvis of a large person, with the fluoroscope, when near the surface. A radiograph is generally necessary to locate a foreign body in the abdomen. Dislocations and fractions of the bones of the extremities and shoulder can generally be seen with the fluoroscope. A good fluoroscope in the hands of a good operator is of the greatest value as a diagnostic agent. A fluoroscope must not be kept exposed to extreme heat, dust or daylight or its life will be short. Always keep the open end of your fluoroscope closed with tissue paper or cloth when not in use and exclude daylight and dust. It is best also to keep it in a dark closet or case when not in use. Do not expose it to the hot sun or place it near a stove. The writer, in a very large experience, has found the failure to observe these points the cause of more x-ray trouble than any other one feature. The operator who does not observe these points wonders why his apparatus does not work like it did when first installed. He often blames the machine or the tube when the trouble is all with the fluoroscope. Take the proper care of your fluoroscope and it will always be ready and will give you the best of service for many years. The pasteboard containing the barium platino cyanide crystals is called the screen. (1905)

Editorial

The vicious practice of allowing a jury of laymen to decide the question of a person's sanity is certainly a relic of the dark ages. This system is in vogue in this State and to make matters worse no one is paid unless a verdict of insanity is reached. We should see the Representatives from our district and have them correct this evil at the next session of the legislature. (1908)

The X-Ray and Its Uses

MARTHA M. BACON, M.D., Kansas City

Roentgen or x-rays are generated in a vacuum tube, presenting a form of energy manifested in its action upon certain unstable chemical compounds, in which it produces chemical changes, and on certain salts, in which it produces a brilliant phosphoresence. The mode of transmission of this energy and its nature are matters of some importance, but of great obscurity. The cathode ray, discovered and named by Crooks, plays a very important part in the production of the x-ray. It is given off from the cathode, strikes the target of the anode, and is there converted into, and sent forth from the tube as the x-ray. The cathode rays are visible in a low vacuum tube, giving a blue or purple color. They act similarly to the ultra-violet ray and may be focused or deflected.

There are different theories as to the x-ray. Some claim they consist of a stream of hydrogen corpuscles, negatively charged, moving about 70,000 miles per second, causing molecular bombardment within a Cook's tube. Others say they are longitudinal vibrations. The generally accepted theory is that the rays are thrown off as particles from all highly heated and highly electrified bodies. The x-rays are invisible, and can not be reflected or refracted and act at site of entrance as well as exit.

The method of administration, dose, and application of the ray must vary with the object to be accomplished and the tolerance of the patient. . . . In view of its decided dangers, it is better to act cautiously, keeping upon the side of safety, even at an increased expense to patient for prolonged treatment. . . . The time of exposure may vary from two to fifty minutes, according to the condition, reaction and urgency of the case. The patient is carefully protected from the action of the ray with lead, tinfoil, etc., except an area about fifty per cent larger than the area involved. In mammary cancer, the axilla should always be exposed. A medium or soft tube is preferred for superficial conditions and a high tube for deep seated cases.

The reaction, which is the indication for withholding, or greatly diminishing the strength, consists in a tingling, itching, or burning sensation in the skin, slight erythema, slight turgescence, beginning pigmentation, falling of the hair, or a decided change in its appearance.

The value of the x-ray as an aid to diagnosis in bone lesions and foreign bodies, needs no mention here. Its use in diagnosis of chest diseases has not received much attention. In several clinics in Europe, an x-ray examination of the chest is considered as important as the observation of the physical signs.

There is on longer any question regarding the value of the x-ray in many classes of skin diseases. In lupus vulgaris most brilliant results have been obtained. Of acne, eczema, psoriasis, pruritis, sycosis, mycosis fungoides, senile keratosis, venereal condylomata, thousands of cases have been cured or treated with unusual success. In epithelioma the x-ray may be classed as a specific cure. The next class of cases most successfully treated is cancer of the breast.

. . . . .

. . . The ray seems to exert a selective action on the pathogenic growth, and the process by which it disappears is usually one of drying and shrivelling, rather than of sloughing. The reason for this apparent selective action, while not altogether clear, is probably that the low vitality of the neoplastic tissue as compared with the surrounding healthy tissue, causes it to react more readily than the latter.

In masses which have fallen off following treatment by the x-ray and have been examined under the microscope, the cancer cells were found destroyed, when before treatment the microscope showed the cells most malignant and the clinical history had been one of rapid growth. . . . Surgery has its place and if combined with the therapeutic use of the x-ray, an agent of known power and selective action on the cancer cell a larger percentage of this class of cases will be spared to years of usefulness. Every case operated on for cancer should be subjected to the ray immediately after operation to prevent recurrence and metastasis. The ray also has a field of usefulness in the treatment of malignant disease preliminary to operation, when for any reason it must be delayed. In such cases it would doubtless be possible at times to inhibit the development of the growth and render less dangerous the delay. In exophthalmic goiter, x-radiation has proven very successful. In keloid, the ray gives better results than any other agent and it effects complete disappearance of the growth and its replacement by a smooth white scar. Diffuse keloidal conditions following burns are not so successfully treated. In leukemia, we have in the x-ray an efficient means of relief and in some cases of apparent cure.

The x-ray has its dangers as well as uses, and operators should take every precaution to protect themselves against this subtle force. But the experience of the pioneer workers in this field has made it possible to avoid that condition known as x-ray burn, or other breaking down of healthy tissue from the frequent exposure to the ray. (1906)

Diabetes Mellitus and Its Curability

C. C. SEABROOK, M.D., Burlingame

This disease, like many others, continues to be a mystery to the profession; but of late years we are beginning to recognize that it is, essentially one of impaired nutrition or metabolism. We are able to follow the several evidences of abnormal nutrition, and its effect on the general, as well as local (if such a term is permissable) health of an individual, but there we are forced to stop because we do not know of what that general functional activity of the cellular elements of the body consists of that are included under the general term of nutrition or metabolism, therefore the writer does not come before you with a specific, that will cure all cases of this disease; no matter what may be the idiosyncrasies of the individual; the remote or exciting causes, and environment; but he does offer you medical measures that in many instances of this, to many, dreaded disease, will completely arrest the process of disturbed metabolism and direct it into its normal course, and enable many of these cases to regain their normal physical selves.

More particularly, he wishes to call your attention to two or three clinical observations, which if they have been observed by others, it has never been his good fortune to see them in print.

As to cause; briefly, one late writer has claimed that its cause is specific, in the sense that it is one of the tertiary lesions of syphilis, and claims a record of 20 odd cases in which positive cures followed his special specific treatment, but that which he claims a specific treatment, is such only that it is a powerful cell tonic and stimulant to nutrition. And all plans of treatment that are successful in favorably modifying the progress of the disease, will be found to be one that materially stimulates nutrition, and it is by this means alone that this disease can be, or is, cured. Another close observer has made mathematical calculation of the quantity of food each diabetic should take, based on the output of sugar; but this does not modify, in any degree the course of the disease.

As to the cause of this peculiar disease, we are just as much at loss today as in the past, excepting that we know that certain exciting causes will bring it on in many cases. Such as severe nervous shocks, trouble of one kind or another will develop it in some individuals. The writer has personal knowledge of an instance in which a patient died on the operating table under circumstances which profoundly impressed all of the professional gentlemen present; one of whom developed diabetes within one week, and others later. Beyond this we know little, excepting as stated, it is essentially a disease of impaired nutrition. We do not know whether there is a specific toxin; a specific germ or an organic structural lesion of some central control, as in the base of the fourth ventricle; or impaired nerve stimuli of the organs of secretion. No amount of speculative theorizing enables us to deceive ourselves into thinking we know more; nor will the writer endeavor to induce you to think he possesses more definite knowledge.

Dieting never cures. It has never been my good fortune to see a case that was more than temporarily relieved by dieting. But the writer has seen cases who were positively injured by a too strict diet. And there can be no question, clinically, but that some individuals require more carbonaceous food than others; while others require more. . . . (1906)

Who Attends Medical Societies?

This question is easily answered. It's the busy, wide-awake men of the profession. Yet we often hear doctors say, "O, I am so busy I can't find time to go," and yet they overlook the fact that the busy doctor is the society man in every community. Reverse the order and you have it this way: The medical society man is the busy doctor. Why? Because he is abreast of the times, and when he goes away to attend the various medical societies to which he belongs his patrons know that it is for their good, and hence his practice is largely increased. The medical society is the place to go if you wish to come in contact with the best and most advanced ideas in the profession. It is next to the postgraduate school in keeping polished and in accord with the very latest and best in the science of medicine. In another way it may be considered an outing, as you are away from the hum-drum of your every day work, which makes it restful and you go back to your practice refreshed mentally and physically. (1902)

A Kansas City, Mo., M.D., claims that he was chloroformed by one of his fair patients and separated from his cash to the tune of $135. How delightful it must be to have a fair young anesthetist take your cash in a scientific manner. Contrast this with the uncouth, untutored footpad who clubs his victim into insensibility and you will no doubt accept the new way. This "painless extractor" method should become very popular. (1902)

Venereal Disease

(A discussion suitable for handing to the laity.)

Because one quarter of the population of such cities as Paris, Munich, New York, etc., are or have been affected with veneral disease, because 40 per cent of barren marriages are due to gonorrhea, because venereal disease is determining who shall constitute the future generation of this nation, it is needful for the laity to learn at least the elements of the disease.

Venereal disease is of two distinct forms, the one local, the other constitutional in its effect on the body. The local disease is gonorrhea, the constitutional is syphilis.

These diseases are as old certainly as civilization and mark the effort of man to rise above the beast, for wherever moral degeneracy is most abundant, these diseases reign. Gonorrhea is caused by a diplococcus (gonococcus) which is able to set up an inflammation in mucous membranes. It then burrows in the pits and glands of the membrane and is practically ineradicable. Its symptoms are swelling and profuse discharge of pus. These symptoms subside so that in the chronic form there is only a watery discharge now and then, with only slight tenderness and inflammation. Of course the disease attacks chiefly the genital organs, though cases are found where the mouth, nose and rectum are the primary seat of the disease. In the male the germs work their way upwards to the glands and the bladder, and may reach the blood to set up acute inflammatory rheumatism of the worst type. When the germs reach the glands sterility is the usual result. At any rate these germs will lie dormant for years only to be aroused by some weakness or excess and then they would be transmitted to the innocent wife, to make of her a semi-invalid.

In the female the germs do not cause so much pain and discomfort, but they do even more damage, because they settle in the glands and tubes of the genital tract and result in barrenness on the one hand, and in frequent inflammations and abscesses on the other. A very large percentage of the gynecological surgery is made necessary by gonorrhea. Hence for the woman the after-effects are even worse than for the man.

Syphilis, on the other hand, causes very little local disturbance—a mere sore or ulcer at the point where the virus enters the system, but after two or three months the body breaks out with coppery papules and similar eruptions and we know that the whole body is affected. Still later tumors appear in the mouth and nose, for instance, where they break down into ulcers; in the brain and nervous system, on the skin, or in the internal organs such as the liver. Hence years after the disease first appeared one may see its effects in the way of a locomotor ataxia, blindness, insanity, or other sore affliction. It may be transmitted to the children (if it does not cause abortion or death of the unborn fetus) and thus carry the curse to the second and third generation.

Persons suffering with gonorrhea or syphilis should of course sleep alone. Their beds should be made with the hands protected by gloves or thoroughly aired without handling until all stains are thoroughly dry. The towels and wash cloths should not be used by any one else. The virus is infectious only when not entirely dry, hence in only a few cases is the trouble communicated except by sexual intercourse. Hence also the disease points to unholy living with all that this expression might mean. Naturally therefore venereal disease will continue until prostitution ceases, and prostitution will continue until the race is regenerated and learns that continence is not unhealthy and that the same law of purity holds for man as for woman.

One of the greatest evils resulting from gonorrhea is the infection of the eyes of babies. This may occur during birth or from the unclean hands of the caretakers. More blindness is probably due to gonorrhea than to any other one disease. This infection of the eye demands the most active as well as the most skillful treatment.

It is the duty of every right minded person to spread the principles of personal purity, and the knowledge of the evils of prostitution and fornication abroad wherever his influence is felt. (1907)

Of what value is a medical society? By the attendance at some of the meetings it could be answered with one word—none. Some men think that it is a waste of time and frequently offer the excuse that they are too busy to attend. In answer to this it can be truthfully said that the busy doctor is the most regular attendant. He cannot afford to miss, because it is recreation, because there is much to be learned and he would be doing his fellow-men an injustice if he did not endeavor to keep abreast of the times. There are so many reasons why medical societies should prosper and so few why they should not—but what's the use. (1910)

After owning an automobile 30 days one is constrained to believe that it is necessary to suffer with autointoxication, autoinfection and autotoxemia to ever think seriously of owning number two. (1909)

—The Days Of World War One, and, "Back To Normalcy"

Suffragettes, Topeka, about 1912.

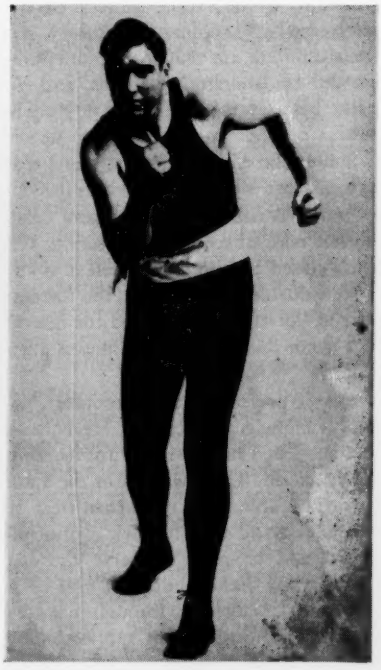
Carrie Nation (without her hatchet), 1901.

Hutchinson to Kansas City—303 miles at 37½ M.P.H.

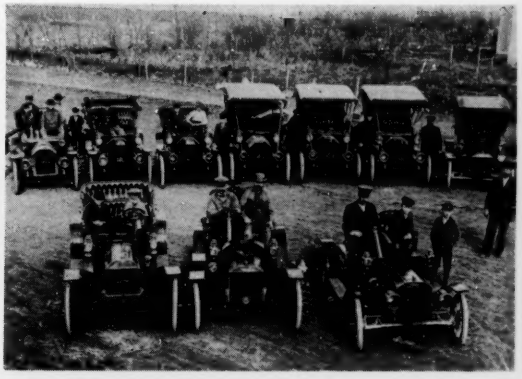
A would-be flying machine mace a Goodland, 1910.

Typical road drag of era 1900-1910, Lecompton.

In The Dawning Of The 20th Century

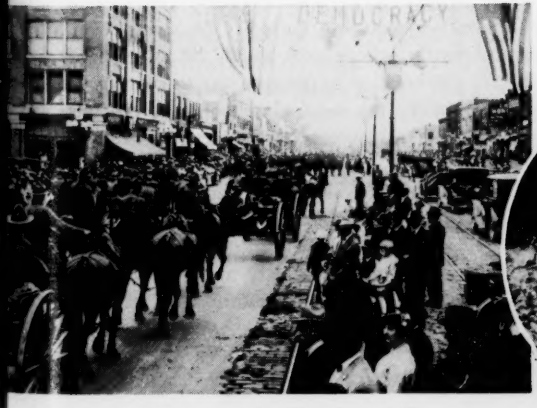


Jess Willard, world's heavyweight champion, about 1918.



Dickinson County farmers with new cars, about 1911.

G.A.R. escorting World War I draftees, Minneapolis, 1918.



Registration Day parade, Topeka, 1917.

R.F.D. wagon and first carrier out of Berryton, in early 1900's.

Special Announcement

Advance in the Requirements for Admission to the School of Medicine

From the beginning of the University, the establishment of a medical school has been contemplated when the conditions were such that it could be done on the same thorough basis that had characterized the foundation of the other schools of the institution. In pursuance of this plan, the medical work of the first two years was organized and put upon a definite basis in 1899. As Lawrence did not furnish sufficient clinical or hospital facilities for the last two years, this was postponed until a suitable opportunity offered itself. This occurred when Dr. Simeon B. Bell, of Rosedale, Kansas, gave the University money and property sufficient to build and equip the necessary laboratories and hospitals, and, by the merging in the University of the Kansas City Medical College, the Medico-chirurgical College of Physicians and Surgeons of Kansas City, making it possible to give the full four-year course for the first time in the college year of 1905-'06.

In the meanwhile the work of the first two years has gradually grown since 1899, in conformity with the advances that medical education is making in this country. The laboratory equipment and library facilities have been increased as fast as the funds became available for such a purpose, until at this time the work is well established and the equipment such that the work can be satisfactorily given.

The new buildings at Rosedale are built to conform with the most advanced requirements of medical instruction. Special laboratories and facilities have been provided for investigation along various lines of medical work, so that it is now felt that the medical instruction given here compares favorably with the other schools of the University and the older medical schools of the country.

In this growth it has been found that, here as elsewhere, this increase in the complexity of the medical course demands an increase in the ability of the student to grasp facts as they are presented to him even from the first. It also requires the more or less complete elimination of certain subjects from the regular medical course.

This advance in medical education has been almost entirely along the lines of more laboratory work and work of greater exactness, while from the standpoint of instruction it means fewer and fewer lectures and more and more individual instruction and individual effort on the part of the student.

It is realized more and more that, in order to give an effective medical education, the student must have a thorough grounding in the various subjects covered by the general terms of anatomy, physiology, and pathology. These subjects are taught almost entirely in laboratories and by laboratory methods, and, for the student who has never been taught to use his hands and powers of observation, this is so new to him that it is almost the end of the first year before he begins to comprehend what is offered to him.

The student who has had but a high-school education finds the great mass of medical literature in German and French closed to him, and when it is considered how very valuable this is, due to the fostering of laboratories and libraries that are used for research by the governments of those countries, it means a very great loss to him.

The public and the profession, as the country grows older and medical knowledge increases, are both demanding more knowledge and a wider information on the part of the physician. The physician of the future must be a man who is able to do more than treat diseases. He must understand the underlying principles of his profession and be ready to serve the community in which he lives, and perhaps it will be his privilege to serve it most efficiently through that greatest and most actively growing field of applied biological science, viz., preventive medicine.

In recognition of these demands, the officials of the University have decided to raise the requirements for entrance to the medical school to one year of approved college work in September, 1908, and probably will soon increase them to two years of approved college work.

With the requirements thus raised, it will be possible for every student to obtain the bachelor's degree at the end of the first two years of medicine, as is now arranged for in the combined college and medical course, requiring six years for completion. This preliminary college work should be so arranged as to give the broadest bearing on the studies which are to follow in the medical school, i.e., subjects which will enable the prospective student of medicine to work effectively.

These two years of college work should include the following studies, with more or less modification to suit individual needs and the institution in which the student is taking this preliminary course: Two years of work in chemistry, with laboratory work, covering

inorganic and organic chemistry well. One year of work in physics, with laboratory work, if possible. At least one year of biology, with laboratory work. This should be zoology or comparative anatomy, if it is possible to devote but one year to it. All of the English, French and German that the student can obtain. In fact, it is felt that this side of his preparation is of but little less importance than the work in science.

The Dean of the scientific department will be glad to discuss and advise prospective medical students as to their preliminary work, and in this way provide for its being arranged so that the student will be best equipped to do effective work upon his entering the Medical School. (1907)

Automobiles in Country Practice

L. REYNOLDS, M.D., Horton

The time has not yet come, when from the standpoint of economy, every physician can adopt the automobile in his practice. I predict that within the next five years, prices will more nearly approach the cost of production. In my opinion a machine can and will be built for five or six hundred dollars with ample power, strength and reliability for a physician's use. It can scarcely be said that such a machine is on the market.

When this time comes this fascinating method of transportation may be considered as a competitor of the horse with due reference to economy. When contemplating the purchase of an auto, I subscribed for a journal several months in advance and read carefully all the information it contained. I also interviewed frequently owners of machines. This theoretical information was of considerable practical value when I came to use a machine. The anatomy and physiology of the thing is very important if one expects to acquire efficiency in their management.

I would not advise any one to purchase an auto who does not endeavor to take the main care of it himself and learn all the adjustments.

Other questions to be settled are:

Shall the machine be an air or water cooler?

Shall it be a steam, gasoline or electric?

Shall it be single or multiple cylinder?

Shall it be a chain or shaft drive?

Shall it be solid or pneumatic tire?

First. The air cooler machine requires a good deal more oil than the water cooler, which it burns, causing the carbon deposits in cylinders which in time require cleaning out or they lose power. This I learned from an owner. The main drawback of the water cooler engine is that in cold weather freezing may occur, breaking cylinders or radiator. This can be avoided in two ways, one to use a solution that will not freeze and the other to draw off the water at the end of each trip, putting in a quart or more of wood alcohol to keep from freezing any small amount of water that might not be entirely drained off. As three or four gallons is the usual amount of water required, it runs off in about ten minutes and requires but little time to replace. Have tried the above and where trips are not too frequent, prefer the latter method. My judgment is that the average user will be better satisfied with the water cooled engine.

Second. Those I have known to try steam, have abandoned them; the electric seems to lack power for hills in country roads, besides outside of the cities they cannot be properly charged. They have the advantage of very quiet running.

Third. The single cylinder seems to be going out of use as multiple cylinders give more regular impulses, causing less jerking and vibration. Four cylinder cars apparently promise to give most general satisfaction.

Fourth. Chain driven machines seem a little less expensive to produce but make more noise; the chains collect dirt and wear out links, losing power or occasionally jumping off the sprocket wheels. Experience seems to be popularizing the shaft drive.

Fifth. The liability to the puncture of the pneumatic tire has led some to try the solid tire, but the greater jar to machine and occupants has been a greater objection than the occasional puncture. One can carry an extra inner tube which can be made to quickly replace the punctured one and cause but little delay. I have had but one puncture in a year, so I do not regard a puncture as a serious or troublesome accident. The larger the tire the less liable to puncture, owing to greater thickness. Think my three and one half inch tires will easily last me two years without retreading.

If you expect to purchase and use an auto without grief, you will be disappointed. I have a friend who has had nine machines extending over as many years. He says the fellow who says he never has any trouble is mistaken—no matter what make he uses. Everyone takes some chances in learning to use them.

The only way one can do any harm with a gasoline auto is to run into something, as they never explode.

There are plenty of chances, however, of running into ditches, buildings, stone walls, etc. There are several things to think of at the same time and until one has formed the habit of running he may omit some important manipulation at a critical moment.

A little sand, dust, rough or muddy roads cause rear wheels to skid, especially if running fast, thus throwing the machine quickly and squarely across the road. A beginner should always run slowly until all liabilities are discovered and understood.

An object of some seriousness is the danger of frightening horses. Lack of reasonable care on the part of some drivers of automobiles has created a good deal of prejudice against them in rural districts. Unless users use due caution this influence is liable to react on them and result in unreasonable legal restrictions. Common decency and regard for the welfare of others ought to influence us to cautiously avoid scaring either teams or drivers, for the latter are more often scared than the teams.

The Kansas state law regulating automobile speed is a reasonable one and if we avoid unreasonable local restrictions by town councils we have nothing objectable in this direction.

The very general use of automobiles has now accustomed many horses to them and people are more careful about taking wild horses on the roads. In our own neighborhood we soon learn to know the safe and unsafe horses, so we may act accordingly. In one years' running I have never caused a runaway or injury. The only trouble I have had was in passing wild horses that were standing hitched and no one near to take care of them. Two different horses have broken loose without doing any harm and a third was a wild colt which had been carelessly hitched, kicked itself loose from a sulky.

An arrogant independence has been very noticeable on the part of the makers and dealers. In consultation with other owners I find makers very generally fail to make their promises good. This has been my experience. The demand has been so great and the prices high, that makers have not been as careful in construction and material as they should.

In the satisfaction one gets when his machine works well, he is apt to forget any annoyances he has had and is liable to give any prospective purchaser a too sanguine idea of their ready utility. Any one of five points when out of adjustment may balk the whole machine. These points are the spark plugs, induction coils, battery, commutater (the timer) and carbureter (the mixer). It may seem very mysterious sometimes what is wrong, but time and experience usually enables us to make a diagnosis. When this is done the treatment is generally easy.

The new user gets a good drill in self control as he is apt, when his machine balks, to have such volunteer remarks as, "Hello Doc, broke down," "Try twisting her tail," and others of similar import.

I would not recommend an auto to a young single doctor to promote his interests with his best girl, as his attention is apt to be too much divided to do justice to either.

Never run fast in narrow places or near ditches. Wide level fields are good places in which to take first lessons. After reasonable efficiency in their management is attained, one should be able to average fifteen miles per hour, safely and easily, on good roads. Twenty miles per hour is easily made on good, level roads. An intimate knowledge of electricity will be of great utility here, more than anywhere else in the private practice of medicine. Some things: lubrication, steering and control must be learned mostly by experience. Many makers give very inadequate instructions to purchasers. One should learn before purchasing, something of the significance of cylinder, diameter and stroke, compression and cycle. Power and weight should receive careful consideration, the former is usually greatly over estimated and the latter is much under stated. For instance, my machine was listed at 1500 pounds, and weighs about a ton, while its power is placed at 18 horse power, when I think it is more nearly 10.

A good machine may be used eight or nine months during an average year in the country and nearly the whole year in paved cities. Think the expense, aside from depreciation in value, need not exceed fifteen dollars per month for all supplies and repairs after one has learned all ordinary adjustments and can take care of the machine himself. I consider a half hour of work daily, during their use, necessary to keep them in good running order. To me this is mostly diversion and amusement.

One who has no mechanical ability and cannot acquire any, may not find an auto a good or satisfactory investment. I use dry cells for battery and carry an ammeter (dry cell tester) with me so I may anticipate exhaustion of cells in time to renew and avoid being stranded away from home.

They may be used in considerable mud but not many volunteer to take them out in mud, except to run home when caught out in the rain. Progress is rather slow and hard on the machine, besides it is considerable work to clean off the mud.

I always feel lonesome without my machine and would not do without one at much greater cost. (1907)

Even though the automobile has caused a number of fatalities and shortened the lives of a number it has become a boon to the doctor. Many an hour heretofore spent in driving the old "nags" can with the help of the auto be spent at his fireside in study and rest. Mr. Auto we hail thee not for the former reasons but for the latter. (1910)

Local Anaesthesia

MERVIN T. SUDLER, M.D., Ph.D., Lawrence

All of us who have had occasion to use an anaesthetic of any kind realize that the perfect anaesthetic has not yet been discovered. We do know, however, that our knowledge of their use is increasing and that many improvements have been added in the last few years. For instance, the present method of giving ether by the drop method is certainly an advance. Spinal anaesthesia has been tried and is apparently rapidly assuming a place where it will be recognized as a relatively safe and efficient way of removing pain in certain kinds of operations.

Local anaesthesia had its beginning when cocaine was first discovered, and as you all know synthetic compounds have been produced from time to time all of which are claimed by the manufacturer to be superior to any other yet known. The methods of using these compounds have also undergone striking changes. In the early days a strong solution of cocaine, usually four per cent, was applied to a mucous membrane and local anaesthesia was obtained in this way. Later the hypodermic syringe was used and it enabled us to dull the sensation of a larger area. But if over a half grain of cocaine is used, disagreeable symptoms occasionally ensue.

We know that the sensation of pain in any superficial part of the body is dependent on nerve cells relatively distant. And that if by use of chemical or physical means we can block or prevent a nerve fiber from carrying the impulse that pain is not produced. If we inject enough physiological salt solution or even sterile water in the tissues around a nerve filament we produce enough disturbance of some sort in that fiber so that it is blocked and impulses do not pass, even though there is no chemical reagent present to act directly upon it. Gant of New York has made use of this principle in operations on the rectum, and uses only sterile water. Apparently in this region of the body with a great deal of connective tissue this form of anaesthesia is unusually successful. Sleich made use of it and his formula has been successfully used for over ten years. That from these examples, the principle of using local anaesthesia for relatively large areas lies in the fact that we surround every nerve filament with a solution containing a sufficient amount of the reagent to block it. Mr. Barker, Professor of Surgery in the University College of the Hospital Medical School, in a recent article reports the use of this solution in 22 cases of goitre. And he has used as much as seven ounces of the solution without causing any ill effects, and he reports that in his cases that the pain was satisfactorily done away with and that an assistant of Kocher who was present said that the anaesthesia produced by this solution was very much more satisfactory than obtained in Kocher's clinic where a small quantity of cocaine solution alone was used. For introducing this solution into the fascials planes in the vicinity of important blood vessels and other important structures he uses a round pointed needle with an eye on one side. He also says that it requires from thirty to forty minutes to obtain the full anesthetic action of the solution, and it is his custom to infiltrate the skin and puncture it in various places and then introduce the solution into the lower part of the structures to be operated on by means of this blunt needle. I have not found it necessary to wait so long a time. I have found this special needle and syringes which I had made from his description to be of great service however.

In using this solution I have found the success depended upon making it carefully and making it fresh for each operation. Then infiltrate massively. Using from one to two ounces well distributed through the skin and tissues under it. After this is done cutting, pinching and a certain amount of blunt dissection causes no pain whatever. If traction is used or tension is put on tissue outside of the infiltrated area then pain results. So this method is not practical for operations where great retraction is necessary. As for instance an appendectomy, although cocaine has been used by Mitchell for operating on typhoid perforations. The class of operations for which it seems to be best adapted are those for the radical cure of inguinal and femoral hernia, varicocoele, hydrococoele and phimosis.

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In exopthalmic goitre and in ordinary cystic goitre it certainly reduces the danger of the operation to the minimum and Keen's recent system of Surgery advises general anaesthesia only when it is impossible to use this. In any of these operations a syringe holding at least ten cubic centimeters and the blunt needles are absolutely necessary for success.

I do not claim that in these solutions we have a perfect anesthetic; neither do I claim we have one which will do away with ether, chloroform or other anesthetics. But I do claim that by this method we can do certain operations with safety where a general anesthetic would be dangerous, and often without pain or very slight pain, that we can do hernia operations, hydrocele and varicocele and phimosis op-

erations without pain and with a minimum amount of discomfort to the patient and a maximum amount of recovery in view for him. Like every other surgical method the more one uses it, the more skill is acquired and the happier the results. It is a method where utmost care must be taken at every point, and I would not recommend it to anyone who is slipshod or careless in his technique. On the whole it is harder to use than to operate under a general anesthetic, for it takes longer, and takes more care. Ordinarily I am much more fatigued from an operation of this sort than from the other. But where an expert anesthetist cannot be had and in the class of operations I have outlined I believe that it will prove of great service to the medical profession. And if it comes to be generally known and used, I believe we will reduce the business of the truss manufacture to a very small percentage of what it is at present. (1908)

Should the State Maintain Sanitoria for Tuberculous Patients?

J. A. MILLIGAN, M.D., Garnett

In the complex sociology existent at the present time in civilized countries certain duties are recognized as falling upon society at large and are therefore assumed by its representative, the State. Among such duties some of those particularly interesting to us as physicians may be mentioned, as the support and education of defectives, mental or physical, such as imbeciles, epileptics, the blind, the deaf and dumb, the insane, for all of which expensive institutions are everywhere maintained. Then we have maintained by counties or municipalities hospitals for the sick and injured, and for those afflicted with contagious diseases, not alone for their own benefit in the way of better care and treatment, but for the protection of the community.

Tuberculosis has been recognized in late years as contagious, and as the disease is generally very long lasting, is much more amenable to treatment than was formerly supposed, and as its spread may be and has been easily checked under proper regulation, many states have appointed commissions for its investigation and for the establishment of properly located sanitoria for its sequestration and treatment. This would seem to be a duty more properly devolving upon the state than upon the city or county, by reason of its great cost, and for the further reason that climatic and sanitary location is especially to be desired, which could not be secured in every town or county.

The mortality statistics of the Great White Plague would be appalling were it not for the promising fact that in the last twenty years, by reason of the better understanding of the disease, there has been a very great decrease in the death rate. A few years back from one-tenth to one-seventh of all deaths were attributed to consumption, but already prevention and cure have made marvelous strides. In the 1907 report of the Massachusetts commission on tuberculosis, find that in 1875 there were 5,800 deaths from tuberculosis in that state, that being at the rate of nearly 35 per 10,000 inhabitants, whereas in 1905, thirty years later, only 4,600 or about 16 per 10,000 succumbed to the disease.

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But the saving of from forty to sixty per cent of those already afflicted with tuberculosis is but a small part of the work accomplished by these sanitoria. The great danger of infection from association with a consumptive has been fully established. A patient housed up in the ordinary modes of life common to the poorer classes of people is almost certain to infect from one to five other members of the family, and to leave about the premises enough bacilli to continue the contagion as long as the life of those germs endures. The removal of this patient to a sanitorium as soon as it is determined that he is a consumptive, not only gives him a better chance of being cured, but it at once stops all danger of these other persons contracting the disease. It has been demonstrated that the removal of a babe born of a tuberculous mother from her care and presence will save it from contracting the disease, and how many babies and children do we find in these nests of contagion crawling about the floors and inhaling the infection with every breath.

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The title of our discussion is, should the state maintain sanitoria for tuberculous patients? If the word state is used in its broadest sense signifying the government or the nation, probably that would place the duty upon the right shoulders. It is too large an undertaking to be handled by a community or one of the

federal states, but must be borne in part at least by the nation. Probably each one present may have recently received some literature from the Committee of One Hundred on National Health, which is struggling to have a department of health established in the Cabinet.

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The subject of tuberculosis is perhaps the most important before the medical profession, for the reason that it is the most promising in the line of prevention and cure and is so universal in its application. Vaccination has nearly annihilated small pox, the extermination of certain mosquitoes bids fair to blot out malaria and yellow fever, antitoxine takes much of the dread from diphtheria, but all these terrible maladies together never claimed a tenth part of the victims that consumption sweeps off the earth. The size of the army of consumptives and the success which has attended the efforts at prevention and cure in the light of modern research, render this one of the most important subjects which can be considered, and would seem to impose upon town, state and nation the duty of providing suitable hospitals for the care of these patients and a system of reports, supervision and instruction for the prevention of its further spread. (1909)

The Goat—Now Laugh

J. E. MINNEY, M.D., Topeka

The goat has been the friend of man since time immemorial. The Angora goat is now taken seriously in America since the value of its fleece for clothing is known. But there is a careless indifference shown and even a stigma cast on the milch goat. This is because of our ignorance, as a people, of the value of goat's milk. Not only of its value as a food, but of its cheapness and freedom from tuberculosis and its superiority to cow's milk. The Bureau of Animal Industry has published a bulletin, No. 68, "Concerning the Milch Goats," which every physician should read.

It seems strange to us, that the American physician is so slow to take up with a food, especially an important food, for which he is eagerly and anxiously seeking for his patients: That he is constantly hunting for a substitute for mother's milk: when he knows that all the food preparations on the market are, as a rule, inferior to cow's milk and that he is behind the poorest classes in Switzerland, Italy, Germany, Austria, France, Norway and Spain in a knowledge of the food value of goat's milk. It is superior in most respects to cow's milk. The yield of the goat is greater than that of the cow, when compared to size and the amount of feed required to keep them. . . .

Peterson, with the peasants of Germany in mind, sums up the worth of the goat in this manner:

(1) The possibility of securing a goat is generally within the reach of the poorest families. (2) The risk and the insurance premium are disproportionately much less in the case of the goat. (3) The goat utilizes its food better than a cow, and gives more milk in proportion to its body weight. (4) The goat is satisfied with little feed and feed of any sort, which is to be had at much less cost. (5) By keeping two goats instead of a cow, the family of the working man may be provided during the entire year with milk by the proper regulation of the time of the birth of the kids. (6) The goat gives a more wholesome milk than the cow and the milk is richer in fats.

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There is almost unanimity of the writers in the countries mentioned of the value of goat's milk for infants, invalids, and cookery. In many cases it is of great medicinal value. Many sanitoriums in France and Switzerland advertise the use of goat's milk as a prominent feature in their treatment.

The wholesomeness of goat's milk for children is undisputed. It is said that the goat will readily adopt infants, calves, lambs, colts, or pigs. That in some countries infants take the milk direct from the udder, and for this purpose the goat willingly enters the house and seeks the infant on the bed. That they conceive a liking for the life they nourish.

Invalids for whom a milk diet is prescribed will find goat's milk by far the best source of supply, as besides being better in feeding power, goat's milk is very much easier of digestion than that of the cow; the reason probably is the extreme minuteness of the fat globules, and hence its similarity to mothers' milk. Owing to the minute fat particles, the cream does not rise so rapidly as in cow's milk and the milk contains about the same amount of fat throughout the day. The goat's milk does not contain any more casein than woman's milk.

Goat's milk is much freer from tubercle bacilli than cow's milk. Some writers claim that goats are abso-

lutely free from tuberculosis. This is putting it too strong. But the following statistics will help to prove the comparative freedom of tuberculosis in the goat to that of the cow. . . .

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We conclude, therefore, that:

1. The goat is freer from disease than the cow and particularly from tuberculosis, and hence the goat milk is more sanitary than that of the cow.
2. That the milk is more nearly like human milk, in the minuteness of its fat globules and the same in casein.
3. That it is more easily digested than the cows' milk, and hence better for infants and invalids.

We believe that the foregoing statements are in the main correct. Then what is the matter with the medical profession of America, and particularly of Kansas? The goat's milk is ideal in character, kind and quality as a food, and its freedom from disease germs and its cheapness are all in its favor and yet it is seldom mentioned in our medical societies or recommended by our physicians. It is an economical food and within reach of the poor. It would be exceptional to find a family so poor in Kansas who could not own two or more milch goats, and have ground and space to keep, and thus solve the infant food and food problem of the family to a large extent and help to prevent the spread of tuberculosis. (1909)

Some Observations on the Work of the State Board of Health

S. J. CRUMBINE, M.D., Topeka

The Kansas State Board of Health was organized April 10, 1885. Until recent years the work of the State Board of Health as defined in the laws on the statute books was not extensive, but largely of an advisory character, and it is believed that with the meager authority it had, and the circumscribed scope of its usefulness as outlined in the laws, that its work was as well done as by similar boards under like circumstances. It is not my purpose to delve into ancient history, but to outline in as brief a way as I may some of the work that has been done the past few years, that in which we are now engaged, and the outlook and needs for the future.

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Soon after assuming the duties of secretary, I became convinced of the necessity of having some frequent means of communication with health officers and the public in general, who might be interested, and the idea of a monthly publication, the *Bulletin,* was conceived. . . . Thus, the sanitary forces have been reorganized, and the central bureau put into close and intimate touch with the one hundred and ten health officers, including the state institutions of the state. The *Bulletin* in the meantime has grown to a publication from 16 to 32 pages. . . .

In the matter of the collection of vital statistics, it is at once admitted that our present system is both cumbersome and inadequate. . . .

The Board is, however, endeavoring to do more than collect statistics on epidemic diseases, it has made a distinct effort looking towards the suppression or control of communicable diseases.

During the past summer a number of towns in Western Kansas were visited by the secretary, accompanied by the Board's sanitary and civil engineer, and diligent inquiry made into the cause of typhoid fever, which was so prevalent in the western section of the state. . . .

We became convinced in these investigations that the fly plays a very important part in the dissemination of typhoid fever. At all events, in a number of western cities, in which the water supply was above suspicion, and in which there was no common milk supply, it seems to be reasonably certain that the fly was the carrier of infection.

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Food and Drugs.—The department of food and drugs has taken up a very large share of the Board's work during this past year. When it is remembered that there are in the neighborhood of 5,000 retail groceries, 1,200 retail drug stores, and about 500 wholesale, jobbing and manufacturing plants of various kinds, whose products all come under the jurisdiction of the food and drugs law, it can be readily seen the enormous amount of work suddenly thrust upon the department. Being a new law, many of these parties were clamoring for information concerning its provisions, and we found ourselves well nigh overwhelmed with the task set before us last spring. The law provides for four inspectors. They have been di-

vided, making three food inspectors, and one drug inspector, the latter of course being a practical pharmacist and a graduate of the University School of Pharmacy. Early last spring it was thought that much might be accomplished in the way of educating the dealers, on the one hand, and of making ourselves acquainted with the commercial side of this great question, on the other, by visiting the larger cities of the state and holding meetings, in which these various dealers and manufacturers might be brought together for a conference. This was accordingly done, and in company with the three analysts of the Board, Professors Bailey, Sayre and Willard, we visited the larger cities of the state, holding meetings and illuminating and explaining the provisions of the law, and in turn gaining much valuable information ourselves. Looking backward at this time, I am convinced that this was one of the most important and best things that we could have done, as we were enabled to meet these men face to face and assure them that this coming together was for mutual cooperation and advantage, that it was not our purpose to be arbitrary in the enforcement of the law, but that we might be of mutual aid and assistance in re-adjusting their business to the new order of things. Of course it was pointed out clearly that the law would be literally enforced after a reasonable length of time had elapsed for bringing about this readjustment. Accordingly, October 1, 1907, was selected, at which time goods sold in this state were supposed to be legal.

In the meantime we took large numbers of samples of both foods and drugs for analysis for the purpose of finding out the state of the market. Naturally, we found that fraud and deceit were common practice in many of our staple food products, but we were scarcely prepared to find that such fraud and adulteration existed in drug products.

This leads me to give expression to the impression which appears to me is entirely logical with the facts in the case, and that is, that while I recognize that much of our medication is entirely empirical, yet a satisfactory result has in my judgement, often been defeated by reason of the practical worthlessness of the drug used, rather than for the reason that it may not have been an appropriate remedy. For illustration, we have found that very many of the fluid extracts and tinctures upon the market do not contain the alkaloidal strength as required by the U. S. Pharmacopoeia, that our tincture of iodine, spirits of camphor and tincture of nux vomica are of various degrees of quality and strength. Recently, a number of samples of spirits of camphor was found to be very little better than water of camphor. We have yet to find an essential oil on the market that is of standard strength. It is almost impossible to find a pure spirits of turpentine.

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One of the most difficult tasks set before us is that of eliminating these false and misleading statements from the patent medicines. The food and drug law declares that any statement, design or device on any food or drug product, that is false or misleading in any particular, is misbranded under the law. With this authority it has been our purpose to eliminate all glaringly false and misleading statements that are usually found on the labels and cartons of these nostrums.

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The Department has determined that this utter disregard for the food and drugs law, which is thus manifest under the pretense of running a drug store in which medicines and prescriptions are presumed to be prepared for the patients of the physicians of the state is a crime against the health, morals and decency of our fair commonwealth, and must be stopped; and I appeal to the medical profession for their moral support in thus ridding legitimate pharmacy of this incubus, and in protecting the interests of the physician and his patient.

The improvement in the grade and quality of foods that are now on the market has been more marked than in that of drugs. Strange to say, the grocers, generally speaking have been more alert and anxious to learn the requirements of the law, and to adjust their business to the new conditions than has been the average druggist. Moreover, the frequency with which grocers' stocks are turned made this matter of adjustment more easy of accomplishment.

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The legislature of 1907 passed a law of no less importance than the food and drugs law itself, which is commonly known as the water and sewerage law. This in effect places all municipal water supplies and sewerage systems under the jurisdiction of the Board. The law requires certain information, together with plans and specifications of every water supply plant and sewerage system in operation when the law went into effect to be filed with the Board, and that all future extensions of the water supply or sewerage systems, and all new plants constructed shall receive the approval of the Board before such construction or extension.

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As an illustration of the conditions of some of the cities, I beg to call your attention to the cities situated along the course of the Neosho River. Six cities secure their water supply from this river; each one of these cities in turn discharge their untreated sewerage into this river, and thus the water is not only entirely unsafe, but positively filthy by the time it reaches the cities in the southern part of the state. None of these cities have an adequate purification system, and in each one

a positive bacteriological test for the colon bacillus has been made a number of times.

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It is evident that such information must be of very great value not only to the people of the state, but to boards of health as furnishing a ground work for the interpretation of water borne diseases, and of suggesting proper preventive measures for their suppression. This cooperative work might be briefly summarized as follows:

First, to determine the nature and condition of the natural water supplies of the state.

Second, to determine to what extent the natural waters are being contaminated by sewage from cities.

Third, to determine to what extent the natural waters are being polluted by industrial wastes, such as come from packing houses, creameries, smelters, refineries, oil wells, salt works, etc., and in what way these wastes might be utilized for beneficial purposes.

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The work of this department has been growing in importance and in the number of examinations made, as the months go by. Strange to say, the physicians of the smaller towns and cities are availing themselves of the privilege of having free examinations made of specimens of sputum, swabbings from the throat, and blood, more freely than those in the larger cities. Naturally, with our present limited equipment and help, the amount of work that can be done is limited.

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Present and Future Problems.—One of the greatest, if indeed, not the most important problem that can engage the attention of any board, society or individual, is that of tuberculosis. The number of deaths from consumption in Kansas reported for the year 1905 was 965, for 1906, 882, and for 1907, approximately 1,000, all the reports not yet having been received. This would make a death rate in the first instance of 63.7, and 56.7 per hundred thousand population of counties reporting, and of approximately 65 per 100,000 in this last year. When it is remembered that our reports are incomplete, it might be asserted that the actual number of deaths from tuberculosis in its various forms is somewhere between twelve and fifteen hundred annually.

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The time has come for the profession of this state to get out and work for what they want, to arouse public opinion in the first place, by giving these matters publicity, and to see the representatives and senators in person in the second place, that they may be advised of your wants, and know that you are insisting that the bills be passed.

In a recent pamphlet issued by the Bureau of Animal Industry of the Department of Agriculture at Washington, Dr. Melvin gave expression to the following sentiment, that whatever plans or methods might be adopted for the eradication of tuberculosis they must fail to achieve success until such time as the tuberculous dairy cow is effectively eliminated.

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(1909)

The County Society

In the scheme of reorganization the county society is the unit and in fact the chief part of the medical organization. It decides who shall be members of the state society, for unless the county society admits a man to its membership, he is barred from the state society. To it belongs the work of enforcing our laws and also of educating the public. Its importance is further shown that hereafter a physician may not pay his state dues direct to Dr. Munn, our state treasurer, but must hand them over to his county treasurer.

Even in the matter of papers to be read the county society is all important, for the ideal is that in the state society only such papers shall be read as shall have been read acceptably before an auxiliary society. Thus in the model constitution issued by our national association provision is made that after such and such a date no paper shall be given room in the state program that has not first been read in an auxiliary society. (1903)

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The Origin of the University of Kansas School of Medicine

S. W. WILLISTON, M.D., Kansas City

As early as 1890 the University of Kansas offered to students of medicine a single year's work in the scientific branches, which work it was hoped would be accepted by reputable medical colleges in lieu of similar work in the medical schools proper. Unfortunately, the requirements of the various State Boards of Health forbade such recognition for work done outside of the strictly professional schools, and the course failed in consequence to attract any considerable number of students. It became necessary therefore, either to abandon all attempts to do work considered by the medical colleges as professional; or to so extend and strengthen the medical courses in the University as to compel their recognition. Various attempts were made in the succeeding years to affiliate or intergrate the medical work with some recognized medical college of the state, but without success. In 1897 a rather bold plan was formulated to provide a medical course of two years' extent, to be in all respects of the character and of the quality of the first two years work in the best medical colleges, eliminating only any clinical studies and substituting in their place the strictly scientific work of the last two years of some colleges. It was expected that as soon as the capacity and desire of the University to provide such instruction of a high character was demonstrated, it would receive the recognition of the better colleges throughout the country, an absolutely vital necessity, since without direct articulation with institutions granting the medical degree, the course was doomed to absolute failure. The scientific departments were extended and so modified as to furnish facilities for instruction of a medical character; the department of physiology was greatly extended and given facilities for high grade laboratory work; and for the first time in an American university not granting the degree of Doctor of Medicine, the department of human anatomy was founded and provided with the best facilities.

Thirty-two students matriculated in the autumn of 1898, at the opening of this two years' course, twenty-three of whom completed the course with credit, all of whom (save one or two who abandoned further professional studies) are now reputable practitioners of medicine. From the beginning, it was the policy of the faculty to demand thorough work on the part of its students, knowing that the only hope of success for the school lay in the character of its graduates; and this policy has been continued, I believe, to the present time. During the writer's connection with the school, not a single one of its graduates failed to receive full credit for the work done at the University of Kansas, nor has any been plucked or conditioned in his further work.

A fight for the recognition of this two years course was anticipated from the start, because of the peculiar and somewhat medieval requirements of licensing boards in America, but no one anticipated that this struggle for recognition would be so severe as it was. The various Boards of Health refused at first, as formerly, to receive as candidates for practice students who had not pursued a full four years' course in medicine at a "regular medical school in good standing," and since the medical school did not grant the degree of doctor of medicine it could not claim to be a "regular medical school." The result was that American colleges of medicine refused to receive on any condition the graduates of the course for advanced standing; and failure was again imminent.

As a preliminary to the recognition of the work done at the University of Kansas, it became necessary to obtain recognition of it by its own faculty, which would seem to be a trifling thing, but which in reality was perhaps the most difficult of all. Some of the conservative of the University faculty opposed the recognition of human anatomy and physiology as being equivalent to the work done in comparative anatomy and physiology previously done at the University, which was recognized as not being professional in character, and consequently not so useful to the student. By persistence, however, this opposition was overcome in June 1899. A few days later the present writer presented the claims of the school to recognition before the Association of American Medical Colleges, which had hitherto refused such recognition. The fight here resulted in victory, afterward consummated at the meeting of the Association at Atlantic City. It was supposed that this would be the end of the matter, but unfortunately the Illinois State Board of Health, one of the most influential of the country at that time, still refused recognition, preventing the acceptance by the Chicago Colleges of Medicine of students from the University for advanced standing. Inasmuch as this refusal set a very pernicious standard, it became necessary that it should be reversed. By personal interviews with the president of that Board, and with the assistance of President Harper of the

University of Chicago, this recognition was finally won; and the telegram acknowledging that fact a little later gave the greatest encouragement to the faculty of the University of Kansas School of Medicine. Finally in the spring of 1902 like recognition was granted by the Regents of the University of New York; and the Kansas University School of Medicine was finally established as a "reputable school of medicine," though giving only the first two years' work of the course and not granting the degree of Doctor of Medicine. Since that time, various like courses have been established in other Universities of America, receiving recognition as a matter of course; but the University of Kansas was the pioneer that made the way easy.

As early as 1876, the writer, while a student of medicine at the University of Iowa, urged in various papers of Kansas and Kansas City the immediate establishment of a school of medicine as a part of the University of Kansas. He little supposed at the time that he himself would be given the privilege so many years afterward of assisting in the establishment of that school. Nothing in his life has been a greater source of satisfaction to him than his participation in the founding of the Kansas School of Medicine; because he firmly believes that in the end all colleges of medicine must become integral parts of the great universities and especially of the state universities; that through them the highest advancement of medical education must be made. It was his privilege to serve various terms as a member of the Kansas State Boards of Health and Medical Examination; and as a member of the Board of Health, he urged an attempt on the part of the board to establish adequate laws controlling the practice of medicine in the state of Kansas, previous ones framed by the physicians of the state having repeatedly failed. A committee appointed by this board in the summer of 1901, of which the present writer was chairman, after a thorough study of the medical practice laws of the various states of the Union, drafted laws which after minor changes by the board, and other unimportant ones by the legislature, became the present laws controlling the practice of medicine in Kansas. Various others have laid claim to the authorship of these laws, but the writer here once for all would emphatically state that whatever credit these laws should receive is due the committee of the State Board of Health. It was very evident to all that not only the practice of medicine, but all schools of medicine in the state of Kansas, must suffer in the laxity of laws governing practice; and the inauguration of proper medical laws, the writer firmly believes, has been a direct and important aid in the development of the Kansas University School of Medicine.

The writer, though no longer connected with the University of Kansas or its medical school, rejoices as much as can any one in its development, and is confident that it has a brilliant and most useful future before it (1910)

The Use of Tuberculin in the Diagnosis of Tuberculosis

M. A. BARBER, M.D., Rosedale

In reviewing the literature on the use of tuberculin in diagnosis one is struck by the diversity of opinion on the part of excellent authors regarding the reliability of the different tests. We have all variations from those who deny the specificity of tuberculin and hence hold that its use has no diagnostic value to those who like Wolff-Eisner, ascribe to tuberculin not only a high diagnostic value but a prognostic as well. However, if we summarize the opinions of the majority we find the prevailing view is that the tuberculin reaction is specific, though not necessarily so to an active lesion, and that this specific action may be demonstrated in the lower animals as well as in man.

It is not the intention of this paper to review the very many recent articles on this subject, but merely to bring forward some practical considerations which may be of use to the physician who has to do with tuberculous cases.

First we know that tuberculin, in order to bring about a reaction, should be so far introduced into the body that it may readily be taken up by the lymph or blood channels; second, we recognize that the tuberculin test, like all biological tests, depends on the quantity as well as on the quality of the substance employed. It is evident then that the ophthalmo test of Calmette and Wolff-Eisner, the cutaneous of von Pirquet and the percutaneous of Moro suffered a disadvantage in that it is impossible, practically at least, to accurately gauge the quantity of tuberculin injected.

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(1910)

Salvarsan

N. C. MORROW, M.D., Altamont

606. Arseno-benzol, or Salvarsan as it has been christened for commercial purposes is an arsenic compound, having two molecules of trivalent arsenic united respectively to each other and to two benzine radicals. In each of the benzene radicals one atom of H has been replaced by the amine group, NH_2, and one atom of H by the hydroxyl or phenol group OH. The arsenic being in its trivalent form makes it a powerful reducing agent. The amine groups give it weak basic properties, enabling it to combine with acids to form salts. Salvarsan, the commercial product, is the hydrochloride. The hydroxyl or phenol groups give it the power to combine with strong bases (such as NaOH) forming phenolates. The basic properties imparted by the amine groups are so weak that where its salts are dissolved in water they are decomposed with the liberation of an acid. Addition of NaOH causes a precipitate of the insoluble base, which is used in suspension for subcutaneous and intramuscular injection. Further addition of NaOH produces the soluble Na salt, which is used in solution for intravenous injection. So much for the chemical properties of 606. Now for its origin.

For a number of years Ehrlich has been working on the synthesis of drugs, starting from the basic idea that a specific chemical affinity exists between specific living cells and specific chemical substances. He believed that for each specific parasite a specific curative drug could be found. But such a curative drug must have highly parasitropic activities and negligible organotropic activities, in other words it must have the power of destroying the parasitic organisms, and yet leave the organic cells of the host uninjured. How the animal parasites causing malaria, sleeping sickness, relapsing fever, syphilis, etc., apparently cannot be successfully attacked by means of immune sera; hence their conquest must be attempted by means of chemical substances. So it is with this class of parasites that most of Ehrlich's researches have been conducted.

Because of the epidemic of sleeping sickness in Africa and because the trympanosome is easily transferable to mice, he began working with trympanosomes. He soon succeeded in producing a new substance, trypan-red, which absolutely cured every infected mouse with one injection. This was the first time that an animal had been completely sterilized, i.e., that every one of the parasites within the body had been destroyed by one dose of a disinfectant. It was further discovered that if a smaller dose were used all the parasites would disappear from the circulation for a given time and then reappear. If the dose were repeated the parasites would again disappear only to return after a shorter interval. If several such doses were given a strain of trympanosomes would be produced on which trypan-red had absolutely no effect. And this power of resistance would be transmitted to their offspring for many generations. The demonstration that these parasites could so readily become resistant to chemical substances led to the conclusion that in order to permanently cure a parasitic disease it is necessary to destroy in the shortest possible time, i.e., by one injection, all the parasites in the body. This act of sterilization with one dose, Ehrlich designated as "therapia sterilisans magna."

Parasitropic drugs may be divided into two great classes. 1. Those that have a highly destructive action on parasites outside the body and have no effect within the body, such as $HgCl_2$. 2. Those which have no effect whatever on parasites outside the body, but show a high sterilizing power within the body. Obviously this new type of therapeutic agent belongs to the second class. Their action may be explained in two ways. First, when taken into the body these substances are so changed that they become effective against the invading parasite. Ehrlich has shown this to be the case with atoxyl, which in test tube experiments has absolutely no effect on trympanosomes. If, however, atoxyl is reduced and mixed with a culture of trympanosomes it will destroy them in a dilution as great as 1 to 3 or 4,000,000.

The second explanation is, that the drug has an inhibitory action on some function of the parasites connected with reproduction, or that it destroys some component part of the parasite. This theory also has been proven by laboratory experiment.

In the course of these experiments a large number of chemical substances have been tried, as the number 606 indicates. But very few of them, four or five at most, have been found to have the requisite combination of high parasitropic and low organotropic activities. Most of them are substitution products of some other drugs of known parasitropic power. Arsenobenzol or 606 is a substitution product of atoxyl, a drug that has been used with some degree of success in sleeping sickness. When the potency of 606 against spirochæta pallida was discovered, it was first thoroughly tested in laboratory experiments, then cautiously administered to patients inefected with syphilis, and finally it was placed in the hands of a number of competent observers in order to thoroughly test its efficiency and dangers before giving it to the profession at large. The reports made by most of these observers seemed incredible. The spirochæta pallida disappears completely in from one to three days after

the injection. Intractable lesions that had resisted the usual specific remedies healed with astonishing rapidity, secondary eruptions disappeared as if by magic, and erosive chancres healed completely in a few days. In a large number of cases the Wasserman reaction became negative and remained so indefinitely. The most remarkable results were obtained in intractable tertiary lesions. This may be explained by assuming that there were already a large number of antibodies in the patient's blood which were enormously stimulated by the injection, or that the strain of spirochæta had become greatly attenuated. Of secondary lesions those on the mucous surfaces healed most readily, next the skin lesions of the moister type, while the dry scaly secondaries were but little improved. Of primary lesions the erosive chancre heals much more readily than the indurated type. Cases suffering from para-syphilitic diseases showed no improvement.

As to the technique of administering 606, it is complicated and difficult, and I shall merely give an outline of it. Already many modifications of the original technique have been devised, each carefully labeled with the name of its inventor. Their number and complications are confusing to the disinterested observer, and suggest the idea that possibly not all of them have been conceived from purely scientific or altruistic motives. Salvarsan, the commercial product, is the hydrochloride of arseno-benzol. When dissolved in water HCl is liberated making the solution strongly acid. This is exactly neutralized with NaOH which causes a precipitate of the insoluble base. This insoluble base is used in suspension for subcutaneous or intra-muscular injection. If the suspension is either slightly acid or alkaline the injection is very painful. When excess of NaOH is added to the precipitate it again goes into solution as the Na salt, and it is the solution of this salt that is used for intravenous injection. Ehrlich has recently recommended the use of intravenous method whenever possible.

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(1911)

Sickness Insurance

It is not improbable that in a few years at least, the medical profession will have an opportunity to try out some plan of sickness insurance under federal supervision. There is no argument which so strongly appeals to the American people as one which is expressed in dollars and cents. The Commission on Industrial Relations, appointed by act of Congress in 1912, has recently made a report, and in this report has presented figures that must make some impression upon the commercial world.

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The commission also found that the present methods of disease prevention and of cure are expensive, and that sickness is most prevalent among those who are least able to bear the burden, and, inasmuch as there is no prospect that wages will be increased to the point where these poor people will be able to meet these expenses, the commission proposes to devise some plan by which they may be cared for.

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The loss on account of sickness among the poorer wage earners is now borne by themselves and the physicians. The latter give their services and get something or nothing, as the case may be. Will the average amount received for his services under the insurance system be greater than under the present system? At any rate it will be a lighter burden for the wage earner, for the expense of his misfortune will be shared by his more fortunate brothers. But why should the physician be expected to carry so much of the load? The laboring man does not get his groceries or his fuel or his clothing any cheaper when he is sick than when he is well. It can hardly be hoped that any system of sickness insurance will be adopted which contemplates a tax upon the employers, and it is difficult to see any other system of sickness insurance any prospect for adequate compensation for the physician. (1915)

Things Original from the Kansas State Board of Health

1. First state to inaugurate state-wide anti-fly campaign and originator of the slogan "swat the fly" now a world-wide expression.

2. First state to abolish common drinking cup, now prohibited on interstate trains by federal government and twenty-seven states.

3. First state to abolish roller-towel, now forbidden on interstate carriers after March 1, 1913.

4. First state to forbid use of ice directly in water tanks, on railroad trains to become effective July 1, 1913.

5. First state to establish a standard for oysters and prohibit shipments in old, filthy, wooden tubs, and compelling shipments in glazed metal containers that could be sterilized, and ice packed around instead of in the oysters, saving the consumers annually $75,000.00. Most all of the states have since adopted the Kansas standards.

6. First state to invent a portable emergency hypochlorite plant for purifying polluted city water supply on short notice, in case of typhoid epidemic. Since adopted by many other states and countries. (Engineering news.)

7. First state to utilize the Boy-Scout movement in town clean-ups and anti-fly campaigns. Since has been recommended by National Oragnization.

8. First state to utilize the moving pictures as an educational feature in public health work. Since its utilization has become universal.

9. First state to make investigations covering one year, of the loss of weight in stored butter and flour to check up short weights. This data is now used all over the U. S. by Food Commissioners in short weight frauds.

10. First state to utilize the popular post-card in public health education.

11. First state to investigate the question of "Copper in Oysters." Now considered a classic even by the Federal Government.

12. First state to make a study of tomatoes and canned tomatoes industry.

13. First state to investigate the condition of waters served on railroad trains and stations, resulting in federal government appointing a commission for fixing a standard for "What is pure (safe) water," of which the Kansas Secretary is a member (just appointed).

14. First state to start research work on the relation of the sand-fly to the mysterious disease pellagra (still in progress).

15. First state to have a summer school for physicians and health officers, to train men for state service. (Third annual this year. Fifty registered last year.)

16. First state to undertake a social study of vital statistics to be used for social betterment. (Now under way.)

17. One of five states that the U. S. Public Health Service grades in class A in certain phases of public health work.

18. First state to adopt civil service examination as basis of appointment of Food and Drug Inspectors.

19. First state to fix standard for medicines not standardized by the U. S. P., N. F. and other standard authorities.

20. First state to regulate the sale of deteriorated Patent Medicines. Kansas standards are copied all over the U. S.

21. Requests for *Kansas Health Almanac* from all over the world.

22. Kansas Bulletins used as texts in Domestic Science Departments and High Schools in several states outside of Kansas.

23. The first state to provide for quarterly inspection of all Packing House employees with regard to communicable diseases. (1913)

Income Tax—A Correction

Our attention has been called to a statement in the last number of the JOURNAL that "Physicians whose gross annual income exceeds $6,000 are required to pay, in addition to the regular tax and surtax, a special tax of 8 per cent." We are advised that this statement should have been "Physicians whose net income—" (1918)

Methods and Value of Blood Transfusion

W. M. MILLS, M.D., Topeka

Transfusion of blood is blood transference from one individual into the vascular system of another, and is properly regarded as a genuine tissue transplant and not merely the introduction of a chemical mixture. The success of transfusion of today is due especially to the improvements of technique. With rigid asepsis, proper choice of the blood of the donor, with a rational study of the indications, transfusion has become a simple surgical procedure of incontestable value. The ideal technique makes four requirements: first, absolute asepsis; second, that the blood transfused neither contain clots nor substances that would cause clotting in the vessels of the recipient; third, ability to measure the amount of blood transfused; fourth, ease of performance for donor, recipient and operator.

The methods by which transfusion may be accomplished may be grouped under three classes; first, passage of blood directly from donor to recipient, avoiding contact with anything but intima of blood vessels; second, passage through foreign tubes connecting blood vessels of donor and recipient; third, employment of an intermediate receptacle between donor and recipient.

The use of transfusion is based on the fact that transfused blood is an ideal substitute for blood lost in acute hemorrhage; in pathologic hemorrhages is a powerful hemostatic; and in critical cases of secondary anemia it may act as a stimulant.

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A general principle governing the use of transfusion in these acute hemorrhages is that where the bleeding point must be dealt with surgically, transfusion should precede the surgical treatment of the ulcer, or ruptured tube or other source of hemorrhage, and should be of large quantity. Otherwise the transfusion should be of smaller quantity so as to secure the hemostatic effect without raising the blood pressure too much or delayed until the quiescent stage of the hemorrhage, when the vascular system should be "filled to the brim." Shown by the clinical evidence of rosy color and improved pulse and blood pressure.

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The results of transfusion in some of the pathologic hemorrhages are as brilliant as in acute. There is here lacking some element necessary for quick coagulation, as fibrinogen, prothrombin, blood platelets, etc., and this lacking element is supplied by the transfused blood.

Hemorrhages due to jaundice are arrested, and permanently so, if the cause of the disease can be removed by surgical measures. The bleeding of hemophilia is arrested for some time, although the disease is not cured, and there may be subsequent hemorrhages.

It is in cases of hemorrhagic disease of the newborn that some of the most striking results are seen. Here the mortality was formerly estimated as high as 75 per cent; while with transfusion restoring the lost blood and stopping the hemorrhage, the figures are more than reversed. Lespinasse reports fifteen personal cases with two deaths; and both were syphilitic. Vincent has reported nine cases with one death. The writer has had one critical case cured by syringe transfusion. Before resorting to transfusion of human blood, the indications point to the injection of any serum, though preferably human serum; as by this means many cures have been reported in hemorrhagic disease of the new-born, when the hemorrhage has not progressed to the point where the loss of blood itself is a menace to life. On the other hand, many cases have been cured by the transfusion of human blood after failure to secure results by the injection of serum alone. (1916)

Editorial

New York City and Philadelphia are having a severe epidemic of typhoid fever. So soon as the efficacy of typhoid vaccination shall have been established, this disease will disappear, as smallpox has diminished. Two other dreadful diseases however, have appeared which interfere with the annihilation of contagion and epidemics, viz., Christian Science and Chiropractic Numscullery. (1913)

Editorial

Dirty Doctors

People are not strongly impressed by the views upon hygiene and personal cleanliness of a man who is not himself clean. People are but slightly impressed with the dangers of infection when they are examined and treated in an office which is most remarkable for its filth. We should ourselves be clean then we may speak authoritatively to those who depend upon us for advice. We should have clean methods for the care of our instruments, our dressings and our drugs, then we may hope to have the co-operation of our patients and their attendants in our efforts to avoid infections.

This subject of hygiene has become entirely too popular for the doctor who is too lazy, too indifferent, or too busy to apply the ordinary rules of sanitation to himself and his office. Cleanliness is no longer regarded as simply a matter of taste, but is now considered a prerequisite to good health. The people will not long tolerate a careless disregard of the most simple hygienic rules in those to whom they intrust the care of their ailments.

It is not well for one to be confident of his independence in this matter, because of his professional skill nor because of his lack of competition. The people are supreme and they have ways of correcting obnoxious conditions that are effective if not always agreeable. In this connection it may be well to quote the following from a statement by the Secretary of the Board of Health:

"There has scarcely been a session of the Legislature when I have appeared before it and committees concerning work and appropriation for this department, particularly as related to the Division of Foods and Drugs, but what I have been humiliated, if not insulted by someone insisting that the Board inspect doctors' offices, which they state are often the dirtiest places in the various towns."

It would be rather humiliating for the legislature to require the regular inspection of doctors' offices.

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(1916)

Editorial

Our Duty

The medical profession of this country seems very slow to realize that a real emergency exists. The government has been persistently calling for medical men for the great army it is preparing to send to the battle field.

Our profession is not unpatriotic. There has never yet been a crisis in the affairs of the world to which the medical profession did not rise en masse and respond to the call of humanity. It is certainly only because the need has not been fully appreciated that our men have not come forward.

The estimated requirement is 20,000 medical officers for the 2,000,000 men, but will that number answer all the needs of this war? The allies are asking for help from the medical profession of the United States. England has exhausted its resources and there are not enough men left to properly care for the people at home. In densely populated districts there is one physician for every 4,000 inhabitants and in the sparsely settled areas one for every 2,500 inhabitants—and these men are now subject to call.

Should the war continue for several years it is reasonable to expect that the United States will send several millions of men to the front and this will mean additional thousands of medical officers. In the officering of our army, ten medical officers are to be provided for each one thousand men. It is said that England has found it necessary to provide nineteen medical officers for each thousand soldiers. If then the estimate of 20,000 medical officers appears to be inadequate for the probable needs of the present plans, what is to happen when even this number is so slowly accounted for?

It has been suggested that the whole medical profession be drafted and its members ordered to such duties as the needs may demand. This is perhaps the easiest solution of the problem and, while not particularly creditable to the loyalty of our profession, will more quickly and surely meet the present emergency. Those under 45 years of age are very likely to be sent to the front and those over that age will be used for various duties connected with the care of camps and the examination of recruits.

The number of medical men now asked for is about one-seventh of the total registered physicians in the United States. There are somewhat more than 140,000 registered physicians of whom probably one-half are

over 45 years of age and 30 per cent of the remainder are disqualified for service for various reasons.

There are 122 registered male physicians practicing in Topeka. Of this number 60 are over 45 years of age and 32 are over 55 years of age. This is perhaps a fair average of the age status of the whole profession. If out of 70,000 physicians under 46 years of age 30 per cent are disqualified, there will be left 49,000 from which to draw the needed medical officers. It is safe to predict that before the war is ended every one of these men will be called into active service.

Our patriotism, our loyalty to the cause of humanity and our professional pride demand our prompt response to this call. Every physician in Kansas should tender his services to the government, send in his application for a commission in some department of the medical service, and let those appointed for the purpose decide whether his services will be required. (1917)

The Medical Society in War Times

If there are any reasons why a county society should abandon its meetings at this time, there are many more and better reasons for its making unusual efforts to meet regularly and add every eligible physician in the county to its membership.

In most all county organizations there are a few men who have furnished the time and the work and the energy to keep it going, for the benefit of the others. As was to be expected a good many of these men have joined the Medical Reserve Corps or some other medical corps of the army. In some counties those who are left at home are ready to lie down on the job and abandon the Society.

The privileges of a medical society, and especially of a unit of the Kansas Medical Society, are available equally to all its members, and every member is under the same obligation to the Society. The fact that some of the members have, for a time, been relieved of all of the responsibilities of the Society's existence, except the payment of dues, does not release them from their obligation to assume those responsibilities when the need arrives.

There are a considerable number of men who feel that it is worth while to belong to the Kansas Medical Society for the standing it gives them, if for no other reason. But the only provision for membership in the State Society is through membership in a county organization.

The State Society should make some arrangement by which the dues of all those members who are in the service of our country will be paid for them or remitted. That would be just and fair and no doubt some such action will be taken. But in order that these men may retain their membership in the State Society the organization in which their membership is held must be maintained. It is one of the duties of those who remain at home to see that these county organizations are kept active and progressive.

Some of the county societies have shown a true fraternal spirit by adopting such regulations as will protect and care for the practices of its members who have joined the army service, and give their families a very liberal share of the income. But suppose the members of these societies that stay at home should abandon the organization, then all the fine plans and good resolutions would count for nothing. One cannot believe that a society which has shown that much fraternal spirit is likely to go to sleep because some of its members have gone away, but there are a few organizations that seem to be very indifferent to the present situation.

There are a few county societies in which so many members have been commissioned that it may not seem possible for the few that are left to have regular or profitable meetings. They can, however, have joint meetings with neighboring county societies that will more than likely be of greater value and interest to them than the regular meetings they have formerly had.

The medical profession is destined to play an important part in this war and, from the present outlook in the war zone, the demand upon its resources has hardly begun. The preliminary call for medical officers has not yet been fully met and it is not improbable that three or four times as many will yet be required.

If there ever was an imperative demand for perfect organization it is at this time. There will be many issues, regarding the interests and welfare of those in the service, that can be brought to a satisfactory conclusion only by the perfect co-operation of the medical men at home. There will be many occasions for the concerted action of those at home, in the protection of our own rights and privileges against vicious legislation, and in the enforcement of such provisions as the exigencies of war may make necessary for the conservation of the public health. (1917)

Good Roads

Most every one travels a little these days, some on trains, some in automobiles and a few in wagons and buggies. Even most of those who travel on trains are interested in good roads, but of all people who want good roads, permanent good roads, roads that are good all the year round, the doctor wants them more than anyone. He should be interested, not only in getting good roads constructed, but he should use his influence in getting the right kind of roads.

Of all the disappointments in the matter of roads, the high crowned road and the old macadam are the most bitter. The former is not good to drive on in dry weather and is impossible in wet. It dries off quickly it is true, but the water running off makes crosscuts that are worse to drive over than a cobblestone pavement. This kind of road can be fixed by taking the crown off, but the old macadam which has been neglected gives one nystagmus trying to zigzaz around the holes, and the ones he fails to miss jar the stones out of his gallbladder and tie knots in his intestines. There is no way to repair them except to build them over.

In spite of the general disturbance in public affairs caused by our preparations for war, considerable permanent road building is being projected in Kansas. Before the people along these routes spend much money on the construction of hard surfaced roads they should very carefully consider the matter of maintaining them. A few years ago several very excellent macadam roads were built into Kansas City from several points in Kansas. Today those roads are a disgrace to the State. Whether they could have been kept in a decent state of repair we are unable to say, but it is certain that they were not. If it is impossible to keep macadam roads in repair, no more of them should be built.

There is now a considerable amount of talk in favor of concrete roads. These are usually made in section, with joints every fifteen or twenty feet. They are very fine when new, but after a few years begin to wear at the joints and in driving over them one gets a good jolt every fifteen or twenty feet as the case may be. Brick roads built on sand are a delusion, as a rule. Some five or six years ago several miles of brick road was built into one of the cities of Central Missouri. Today the travel is all on the dirt by the sides of this pavement, the pavement being very badly wrinkled and cut up. The more you try to repair this kind of pavement, the more uneven and rough it gets. Gravel roads are easier kept in repair than any other kind, and when made sufficently wide and not too highly crowned, are as good as concrete or brick. It takes some time to get them into permanent condition, but then they are much more easily kept in condition. Of all the hard surfaced roads we have seen, that from Topeka to Rossville is, for its age, by far the best. It has been kept in repair and gets better and more permanent with age.

In other states one will find the same neglect of roads that have been built at great expense as in Kansas. There is a hard road from Galesburg to Chicago. The portion of this road nearer Galesburg is mostly new and in fine condition, but a hundred miles of it nearer Chicago is badly cut up and greatly in need of repair. The Lincoln Highway, once a great attraction for the motorist, is a "has-been," or at least that portion of it from Chicago to Sterling. This road was constructed with the State's aid, but at the present time is a poor recommendation of the economic foresight of that great commonwealth. (1917)

When we consider the number of deaths from diseases which in a vast number of cases are preventable, it almost appalls one. We should hesitate in our wild scramble to discover something new, which event would hand down our names to posterity, but try and educate the laity in the preventation of typhoid fever, small pox, tuberculosis and many other communicable diseases. This is not meant to carry the idea of non-progression or original research, but to exert ourselves to the utmost in stamping out diseases which we know can be prevented by proper measures. (1908)

Freudian Psychology

MAUD S. DELAND, M.D., Topeka

This paper is merely an effort to show that the Freudian theory is not something unique, bizarre or different from the science of biology, but on the contrary it is quite in keeping with modern physiology in considering man as an adaptive mechanism. Nothing original is claimed; in fact, the chief claim this paper has to your consideration is that it is merely a compilation from books and technical magazines written by people whose extensive work and experiments entitle them to a hearing. Except where condensation was necessary, the exact wording of the author has been preserved in order that the meaning may not be distorted.

For years past we have been observing the symptoms of mental disease and perfecting a classification based thereon. This is good as far as it goes. It is good to know typhoid fever, diphtheria and malaria as clinical entities and to know how to treat them to get the best results, even though that treatment be purely empirical. But it is far better, both from a practical and scientific standpoint, to know their etiology. And so it is with mental diseases. We wish to know the specific causes.

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(1918)

My Experience at the Front

J. G. MISSILDINE, M.D., Parsons

In this attempt to give you some ideas concerning my work with the American Expeditionary Forces I shall not confine my remarks to the medical or surgical aspect, since the work at the front consists of first aid and emergency medical treatment and is not of the most interest unless treated with the movements and experiences in general.

We left the United States early in July and found the following weeks not altogether happy since the submarine activity at that time was at its height. Life belts were constantly worn and frequent life boat alarms were given, all of which was real enough to furnish apprehension. We reached France the last of the month, via England.

A company of casual medical officers was sent from Cherbourg to St. Aignan, which is about a hundred miles south of Paris. After two weeks' instruction at this place in gas drill and the use of Thomas splints I was assigned to the third battalion of the Sixteenth Infantry, a part of the First Division. All luggage which one could not carry was left behind or promptly lost on the way to the front. I joined my outfit in a few days, going by train to Vaucouleurs, thence by automobile to Pagney la Blanche. Here the organization was receiving replacements and the men were being re-equipped, having just come out of the strenuous Chateau Thierry offensive.

At this time I made the acquaintance of the officers and men with whom my real work was to be done. To me this outfit of seasoned regulars was an innovation in the matter of associates, but I quickly learned that their hardness was the most valuable quality a man could possess when real fighting was on and this quality I soon realized was highly communicable to the newcomers.

From here on we marched, always by night, to take part in the St. Mihiel offensive. During the day all the animals and vehicles were kept under cover of a woods, or camouflaged, and the men were likewise kept from the observation of the enemy aircraft. For several days we were within a night's march of our front line, expecting each evening to go into this much heard of drive, which started the morning of September 12. The night before I visited the front line trenches with a party of officers to make a reconnaissance, my special interest being to acquaint myself with the ground to be gone over, and to pick out the best possible first aid post, always considering the availability of the ambulance service, easy access to the battalion while in action, together with as much protection from the enemy fire as possible.

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All of the medical corps men are skilled in dressing wounds and in emergency treatment in general. Morphine to prevent shock and to relieve pain was freely used and was of great value. Antitetanic serum was used as a routine measure, if not in the field, then at the ambulance dressing station. The supply

of dressings is never large enough unless one has the luck to find a supply left behind by the enemy, in which case it was necessary to make sure that they were not left behind for the purpose of infecting those on whom they were used. Usually this was easily done. Everything, including sterile dressings, Thomas splints, and iodine swabs, had to be carried by hand in addition to the regular equipment of army men, and naturally an abundant supply was impossible. It is regrettable that is was sometimes impossible to carry the load started with and that useful material had to be discarded. It was better, however, to be with the battalion with a limited supply of things than to be weighted down to a point where keeping up was impossible and not to be on hand when our help was needed. Keeping up was difficult, for the reason that one met wounded men every little while who required attention. In the St. Mihiel affair the prisoners were used for litter bearers, which saved our fellows splendidly.

Sharp criticism frequently came along from the medical officers farther back because of the failure to properly dress fractures, but to anyone who has followed an advancing outfit of enthusiastic Yankee infantrymen it is perfectly patent that whatever is done must be done quickly or the medical officer and his men are lost from the battalion, and of course of no further service to them.

Following the affair of which I have been speaking, we were sent into the Argonne sector near Verdun, where my division relieved the Thirty-fifth on October 1. This was quite different from the sector we had just left. The resistance was stubborn, enemy machine nests were everywhere, and we were constantly harassed by their high explosive, shrapnel and gas. It has been said that we lacked artillery support, which may be true, but if so, unquestionably unavoidable. The constant shelling of the roads made traffic almost impossible.

Here I was transferred to the regimental dressing station which was located in the demolished village of Charpentry. We used a dugout from which the Germans had been driven and from here evacuated the casualties from the battalions in advance of us. The number of wounded and dead constantly increased, which kept us all working day and night with little time for rest. Many of my friends and men I had learned to like and admire were killed or sent back wounded, among them my orderly, a boy seventeen or eighteen years old, who had served me most faithfully, hit by a shell which mutilated an arm, and almost immediately he was killed by another shell. Nearly all of the first aid men with the regimental dressing station were gassed or wounded. About 3 o'clock the morning of October 3 I was gassed, which incapacitated me for work, and I was evacuated a few hours later. I was yet unable to return to my regiment when the armistice was signed. (1919)

Etiological Factors in Children's Dysenteries

EDWIN H. SCHORER, M.D., Lawrence

Children's dysenteries are of the greatest importance to us as they occur during the summer months, and by many writers on the subject are considered only as the "summer diarrheas of infancy." Many attempts have been made to classify these intestinal disturbances but generally these classifications have been unsatisfactory. With the discovery in 1898 of a bacillus of dysentery by Shiga, a specific etiological factor for at least a group of these disorders was established, and this group we can now call the group of epidemic dysentery. This group, however, does not by any means include all of the summer diarrheas of infancy, for the group of non-specific dysentery, no one causal factor has been discovered.

Before we can consider the various causes of the intestinal disturbances, we must realize that we have two large classes of causes of disease; predisposing and actual. Of these the predisposing causes reduce the vital and physical powers of the body and include such factors as age, sex, race, hygienic conditions of environment, climate, food and heredity. . . . (1910)

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Editorial

In the July number of the JOURNAL, there appeared an editorial explaining the workings of the Medical Defense as is now conducted by the State Association, and I trust we will be pardoned for again referring to the same subject.

The first yearly report of the Defense Board was strong evidence of the success with which the plan works and should stimulate interest in the State Society, to the end that our membership should be doubled.

We are getting this protection without one cent of additional cost for membership and it is desired that the membership fee shall remain the same.

All of us know acceptable members of the profession who are outside of the State Association, and who, perchance, know nothing of the Defense feature.

There are within the borders of the state fully 1,000 doctors who can easily be induced to join the State Society.

What is the best way to reach these men and get them within the fold?

One might say, let them alone if they do not know enough to seek the Society, the Society should not seek them.

This is undoubtedly the wrong argument because many of these men have the intention, the desire to join the Society but procrastination, busy life and a hundred and one things that come up in the life of a doctor causes him to neglect this important matter.

When one of us meets such a doctor say to him, "send in your application to-day," explain to him that the State Society will protect him from unjust suits and blackmail, and thus by deputizing ourselves to bring in new members, we will not only grow stronger, but will be able to keep the dues down to the present low figure.—*H. B. C.* (1912)

Are we not too easily influenced in adopting the "new" things in medicine? For instance, in anaesthetics many have cast aside ether anaesthesia for scopalamin-morphin-cactin, when the percentage of deaths from the former has been proven by Woods to be but one in 16,000. The same author has proven that the mortality in the latter has been one in 300. There may be instances when scopalamin-morphin-cactin anaesthesia is preferable, but it is safe to assume that it will not supplant either. This is also true of the spinal injection of tropo-cocain. There may be a few instances when it is advisable, but is hardly probable that it will reach the universal usage that ether or even chloroform has. There is another fad that had an almost unprecedented run. It was an intestinal antiseptic purported to be many times stronger than corrosive sublimate, yet when taken into the system was harmless except as to its bactericidal powers. It was supposed and exploited to be almost a specific for typhoid fever, and attained enormous success as to sales but clinically was a failure. Let us be conservative in medicine as well as surgery. This is not meant to carry the idea of non-progressiveness. There is plenty of room for every good, new idea, no matter whether in medicine or surgery. (1908)

1921
"The Doctor Extends His Horizons"
1940

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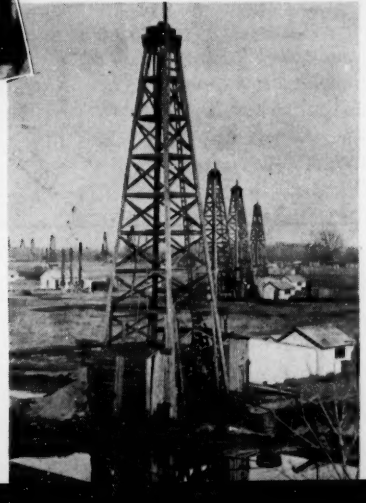

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1. First building, The Menninger Psychiatric Hospital and Sanitarium, Topeka. (1925)
2. Kansas Oil Field scene in early 1920's.
3. Burr Oak CCC Camp, Jewell County. (1930's)

Introduction

Another and more terrible war—a "World War"—is over, and to it Kansas has again made her contribution both in fighting men and support for them. Flying airplanes (or "aeroplanes") are becoming less spectacular because they are more frequently seen. Automobiles are common, though not entirely reliable, and "wireless" communication is coming of age, albeit through headphones. In addition to the railroads through the state, Kansas is now beginning to have some paved highways which will encourage motor travel. Prohibition has now become national in scope, though not with universal approval! Power machinery has become important in farm life as well as in industry.

The electrocardiogram has been introduced and its use is growing. The beginnings of endocrinology are appearing, and the surgeon has invaded the thoracic and cranial cavities for conditions previously not amenable to surgical attack—largely through the advances in anesthesia which have made these procedures possible. J. B. Murphy, Harvey Cushing, and many others are pushing American medicine to a level which is challenging the long European domination. Some public health hazards such as the common drinking cup and roller towel are gone, and the campaign against the housefly is in progress.

As we have made gains in our knowledge of physical health and disease, we are on the brink of a better understanding and greater appreciation of the importance of mental health and provisions for its study and care. Kansas is to be the hub of this growth. We will also note an increasing desire on the part of the physician to participate in social changes and to help mold them, as he expands his horizons, both as a doctor and as a citizen.

Remarks on Infant Feeding

E. G. PADFIELD, M.D., Salina

It is neither my desire nor intention in this paper to take up the many questions which arise in feeding sick and abnormal infants. To go into these questions at all intelligently each separate case would of necessity have to be taken individually and would require many times the time allotted to us here.

From observation, it is my belief that the most important time in the child's life is the first year or two. This is the time when a child is started successfully on its way in life with a good digestive system or with its digestion, and consequently its entire physique, impaired by improper food or with food improperly prepared and given. If the medical profession believes in preventive medicine it has a wonderful chance to show this by taking an intelligent interest in the feeding of every infant. And this not after the child has been brought to you underweight and with digestive disturbances to correct, but rather from the very first day of the child's life, so that there will be no cessation of the normal gain and no disturbances to upset the child.

When we consider the huge number of children who die in the first two years of life, it seems that we cannot over emphasize the importance of this branch of medicine. I know that many will say nature will take care of them—and would in most cases if given the chance. The trouble is that the physician and the parents combined are often able to undo all of the good work that nature attempts.

Taking the normal infant and the normal mother there is of course only one food to consider for the first few months. This is mother's milk, and it is important to keep the child on this diet from the first if it shows a gain in weight. Every effort should be put forth to keep the quantity and quality of the mother's milk up to standard. In this it is essential that the mother be watched very carefully, and that she be given definite instruction as to diet, exercise and hygiene. No child should be taken from the breast simply because the mother thinks she can't nurse it or because she thinks it will not be ladylike to do so. The test by which we can judge whether or not the mother has enough milk or whether it agrees with the child is by the weight curve of the child. This should be noted weekly and put down in black and white, so that a faulty memory will not enter into our calculations in regard to the loss or gain in the child's weight.

Every mother's mind should be disabused of the idea that she will not be able to nurse her child. The psychological effect of these thoughts on the quality and quantity of the milk is very great. Any worry will naturally upset the milk glands in their functioning and thereby cause digestive trouble to the child. It should be the aim of the physician to see that the mother is free from worry as much as possible, especially the first three or four months of the infant's life, or until it gets its digestive apparatus to functioning well.

Next to the importance of seeing that the mother takes the proper care of herself, I would say is the establishing of regular habits in the child, both on account of the effect on the flow of milk and upon the child. The mother should have regular periods for feeding the child. It is far easier for the child to become accustomed to feeding at regular intervals than for it to feed at any time when the mother may think it is hungry. A newborn babe should be put to the breast every two and one-half hours during the day and once at night, after the first twenty-four hours. A great many men now are adopting a three-hour schedule from the first, and it really seems that this is often enough for most strong, healthy babes. But whatever schedule we have the mother adopt, we should insist that the baby be fed according to that schedule. It will be only a few weeks until the child will awaken at its feeding time and will need no outside interference to tell it when to eat.

If a child on mother's milk does well, when should it get additional food and what? Up until recently most authorities advocated no additional food before the child was nine or ten months old. But now it is considered good for the child to start something earlier in the way of nourishment. In supplying the child with extra food it is well to start with very small amounts, in order to see whether or not the digestive organs can take care of it. In addition to orange juice and prune juice, the normal child can digest and benefit itself by taking vegetable broth made from carrots, spinach, turnips and peas. The iron obtained in this way, causes a rapid improvement in the anemia so often seen in children from six to eight months old. At about the seventh month, a cereal such as Ralston's or Cream of Wheat may be given with milk and sugar, given in small amounts at first, and at the end of two weeks one entire feeding may be given. At this age the child digests carbohydrates very well, and in cases where constipation causes trouble, it is usually much improved after the child is taking one feeding a day of the cereal. Zwieback may be given

the child now, it usually enjoys chewing on it, digests it well, and it probably helps some in getting the teeth through sooner than they otherwise would.

At nine to ten months, beef or mutton broth with toast or zwieback may be given. The nourishment in this is not great but the salts and extracts in it probably stimulate digestion. Often at this age, the child apparently gets tired of its regular food, and the addition of the broths seems to get away from the regular run of its diet and helps to get back its appetite as well as helping supply the salts which the child needs. At the end of the first year it should be our aim to have the child on straight cow's milk with the food already mentioned, and an egg every other day.

In case the mother cannot feed her child and have it gain naturally and regularly, what shall it be fed? This is probably the most important question in regard to the child which we will have to decide. Goat's milk chemically is the nearest to mother's milk, but is not a practical food except in isolated cases, as goats are not readily obtainable, and many families in the city would not be able to care for one if they could get it. We have left the different patent foods, the condensed milk and cow's milk. The relation of carbohydrate, fat, and proteid in all of these foods is entirely different from either cow's milk or mother's milk. They are all very high in carbohydrates and comparatively low in fat and proteids. Many children will of course gain rapidly on these foods, due to the high sugar content. But those who have any intestinal trouble do not have the resistance of babies fed either on mother's or cow's milk. The patent foods do not cause as much intestinal trouble as the Eagle Brand Condensed Milk, as their sugar content is largely dextrose and maltose, while the latter contains cane sugar which is much harder to digest and causes more fermentation in the intestines. The only thing in favor of this condensed milk, looking at it any way you like, is that it is easy to prepare, and that is a mighty poor recommendation for something to feed an infant. If the principle of safety first is advocated anywhere, it should be in the feeding of infants. Very few doctors would prescribe medicine for a child if they did not know the size of the dose of each ingredient the child would be taking. But many of them off-hand prescribe this condensed milk and have not the slightest idea of the amount of sugar, proteid or fat the child is getting. And between the average medicine and milk, the latter is far more important for the child.

For general use in infant feeding cow's milk is the best food we can have if mother's milk is not available. It is important to know the per cent of the different elements in the two milks. This follows as given by Dunn:

	Cows	Human
Fat	4.00	4
Sugar	4.75	7
Proteid	3.50	1.50
Salts	.70	.20
Water	87.05	87.30

It is taken for granted that only the cleanest milk will be used, that it is herd milk rather than from a single cow, and that it will have the required 4 per cent of butterfat. The question often arises as to the effect of heat on the milk, as to whether it is hurt by pasteurization or by boiling. As to the first, most authorities hold that pasteurization does not make the milk harder to digest, while it does kill most of the microorganisms. As to the boiled milk, there has been a wide divergence of opinion. There is no evidence of rachitis from the use of milk boiled for two minutes and it undoubtedly makes a softer and more flocculent curd, making the proteid digestion easier. In several cases of proteid indigestion I have used boiled milk, bringing it to a boil and keeping it there for two minutes. The possibility of scurvy is present here, but can be guarded against by the use of fruit juices and vegetables.

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The number of infants who cannot be fed on cow's milk in some modification is very small, in fact, taken before their digestive apparatus has been entirely upset by switching from one proprietary food to another every few days, there are probably no children who cannot thrive on cow's milk if the fat, proteid and carbohydrates are mixed suitably to its digestive power, as shown by the stool and the weight curve.

Probably the method by which we can have the widest variation in the per cent of the food elements and which is used very much at present is the gravity cream and skimmed milk method. Personally I find the methods of Holt to provide all the range necessary but this is used more and should be known by all. The following table gives the percentage of the ingredients used in this modification.

	Fat	Lactose	Proteid
Gravity Cream	16.00	4.50	8.20
Skimmed Milk	0.00	4.50	3.20
Lactose	0.00	100.00	0.00

The simplest calculation is that worked out by Dunn and is based on a mathematical proportion by which all problems in dilution may be solved. It is: That the quantity of an ingredient is to the total quantity of the mixture as the per cent of any element in the ingredients is to the per cent of that element in the mixture. Thus it is that the ounces of an ingredient required to give a certain percentage is found by

dividing the percentage required by the percentage of the element in the ingredient and multiplying by the total number of ounces in the mixture as follows:

We want fat four, lactose six, proteid three. The baby is taking four ounces at a feeding and seven feedings daily, making twenty-eight ounces total. Gravity cream is 16 per cent fat, therefore x = $\frac{4}{16}$ of $\frac{28}{1}$ or 7 which is the number of ounces of cream necessary. Proteid being the same in both the cream and skimmed milk we will find the total number of ounces of both required to give the 3 per cent proteid. x = $\frac{3}{3.2}$ of $\frac{28}{1}$ or 26, the number of ounces of both the cream and milk necessary to get the desired proteid. 26 – 7 is 19, the ounces of skimmed milk. $\frac{28}{28}$ of $\frac{4.5}{1}$ is 4.16 per cent of sugar in the 26 ounces of milk. Six, the per cent desired, minus four, the per cent we have in the milk, gives us two per cent more to be added. x = $\frac{2}{100}$ of $\frac{28}{1}$ or $\frac{56}{100}$ of an ounce to be added. As two rounded tablespoons of lactose equal one ounce, here we would want a little over one.

By modification with alkalies it has been proven that the alkali acts chemically by combining with the casein of cow's milk, thus delaying the precipitation of the curd, which is more flocculent than normal, and easier acted upon by the gastic juice. Lime water, sodium bicarb, or sodium citrate, any one of them can be used as the alkali. Many children do not need this addition, but I believe it is used in practically all cases. Starch dilution with barley water and oatmeal water, act similarly to the alkalies and I find their use as a diluent invaluable.

The use of other soluble carbohydrates other than lactose for milk modification are very good. Some believe the addition of dextrose or dextri-maltose makes the casein curd softer and easier to digest. This is questioned, but all agree that in cases of malnutrition, where the patient is intolerant to lactose and cannot get the benefit needed from the fat in the diet that the dextri-maltose is invaluable as it is the easiest sugar to digest, and can be immediately used for energy production without undergoing further change. In this method of modification I have used both Mellin's food and Mead's dextri-maltose. There is only one objection to Mellin's that I have seen and that is that the parents soon get in the habit of going by the directions in the package rather than by frequent visits to the doctor. This is really a more serious objection than might appear on the surface. If the child does poorly it is the doctor's fault while if it does well Mellin's gets the credit.

In closing I want to emphasize the importance of starting the baby properly. If you can so regulate the child's diet that you have a healthy child at two years of age with no digestive trouble, this same child will continue to advance and be healthier and less likely to the ordinary troubles of childhood than the child not so taken care of in the early period of its life. (1922)

Recent Advances in the Treatment of Diabetes Mellitus

G. A. CHICKERING, M.D., Hutchinson

A new chapter has been opened concerning the treatment of diabetes mellitus. This is of especial interest since therapeutics, for the first time, seems to have a valid reason for having a part in the discussion of the subject. Heretofore, all progress in being able to care for the diabetic has come through the therapeutic assistant, dietetics. It at length had almost come to be accepted that the treament of diabetes had only to do with the biochemical process dealing with protein, carbohydrate and fat and the resultant calories. But, with the bringing forward of iletin, the internal secretory product of the pancreas, a new hope has been awakened, looking toward a therapeutic agent as a prominent factor from this time on in adding years and enjoyment to the life of the diabetic. However, those best fitted to speak on the subject are so well guarded in putting forward their estimates, at this time, of the value of iletin treatment that the rest of us are left to that group at one side with little information but a great deal of interest.

Previous to 1914 the care of the diabetic was so unsatisfactory that to confirm a diagnosis of diabetes in a patient was to insure him of an early death unless he happened to belong to a type of diabetes occurring in the later decades of life when a more or less constant glycosuria seemed to have little influence on the welfare of the patient. It was considered scarcely worth while to undertake to treat diabetes in a child. In fact, Joslin in 1918 summarized the situation in these words: "At the beginning of 1914, the outlook for diabetic patients was depressing. The statistics of the Massachusetts General Hospital showed that in

the preceding sixteen years for each 100 diabetics admitted, 28 were discharged dead, a record which duplicated the experience of the hospital between 1824 and 1898. Physicians dreaded to place their patients in an institution lest the treatment there prescribed prove more disastrous than that adopted by the patient's fancy. Surgeons dodged the diabetic, while the obstetrician was out and out afraid of diabetes and urged pregnant women to have abortions. The neurologist, dermatologist and ophthalmologist would throw up their hands at complications within their respective spheres and exclaim, 'cure the diabetes and then we will help the patient.' It is hard to realize that these conditions prevailed only four brief years ago."

The Allen Starvation Treatment marked the starting point in scientific cure of the diabetic and to Allen, in a large way, is due credit for the appreciation of the pathology of the morbid process as it is known today.

The benefit of this method of treatment is rather strikingly compared to that of the old regimen by Joslin in saying that five years after beginning treatment 7 out of 97 children under 10 years of age were alive. However, it is appreciated by all having to do with the care of diabetics that the general tendency is for the patient more and more to lose his tolerance for carbohydrates. When tolerance has reached a low point the resourcefulness of the physician is taxed to the utmost.

Because of the difficulties presented in the care of the patient in this condition, Newburgh and Marsh of the University of Michigan brought forward rather an astonishing modification in the treatment of diabetes. Heretofore fat was considered a source of great danger in the diet of the diabetic and particularly so in the severe type. These investigators came forward with the dictum that in case the patient can burn any carbohydrate at all, and all cases can be so adjusted as to use some carbohydrate, the furnishing of heat and energy may be obtained from fat similarly as it is in the case of carbohydrate food. The clinical demonstration of this theory when applied to the dietary of a patient is quite striking. An emaciated patient with a severe acidosis and impending coma is dieted in such a way that glucose burning ability is restored. Treating him without reference to high fat dietary it was found that the most food that he could take without showing a glycosuria would yield but 953 calories. The ultimate outcome with this procedure could only be bad and there was nothing left but that the patient still further draw on his body protein and continue to emaciate.

In contradistinction to the type of diet as here tried, it was found that by pushing the fats all that his tolerance would permit the patient could receive food sufficient to yield 2000 calories, and, thus, obtain an adequate diet. However, a hair breadth escape from a starvation to a living diet is not without its accompanying danger, that from acidosis. To this danger two sources contribute, (1) the imperfect metabolism of fats whereby ketogenic, or fatty acid bodies are formed when fat metabolism is not completed to the formation of the end products, CO_2 and H_2O; (2) the formation of ketone bodies from the imperfect breaking down of the protein molecule.

The danger from acidosis and coma from fat in the diet of the diabetic has been recognized a great deal longer than the limits of its safe usage have been understood. The high fat and low protein and carbohydrate diet of Newburgh and Marsh has been given a mathematical expression by Woodyatt of the Sprague Memorial Institute of Chicago in an article entitled "Objects and Methods of Diet Adjustment in Diabetes," in the August, 1921, number of *Archives of Internal Medicine.*

Here, recalling that fat burns in the fire of carbohydrate kindling, he points out the means by which, having determined that the tolerance of a patient for carbohydrate is a certain amount, it is possible to estimate what is the greatest amount of fat which can be completely metabolized by the body for purposes of heat and energy production. He points out that, although glucose is the form in which all carbohydrate food is used by the body, carbohydrate food is not the only source of glucose. The metabolism of the protein molecule furnishes a glucose factor, likewise that of fat furnishes a glucose equivalent. When the protein molecule is metabolized .58 results in the formation of glucose. When fat is metabolized .10 results in the formation of a glucose equivalent. So, the carbohydrate tolerance of a patient is the amount of carbohydrate without glycosuria which may be ingested, taking into account the carbohydrate of the food taken as such and adding to this the glucose element derived from protein metabolism amounting to .58 of the protein, plus the carbohydrate equivalent from fat amounting to .10 of the ingested fat.

If, in considering carbohydrate tolerance, attention is paid but to carbohydrate ingested as carbohydrate the contribution from protein and fat elements of food is likely to results in a glycosuria.

For the reason that the glucose element of food cannot be considered as being derived from but carbohydrate, it is necessary to determine the relationship which is borne to the other food elements, protein and fat.

As regards protein, it may be said that as a result of metabolic processes .58 of protein food goes to form glucose. The other .42, after being broken up into amino acids is largely used for replacing the wear and tear of tissue cells. If this .42 is so small in amount that wear and tear cannot be supplied from the food the deficiency must then be made up from body cells and emaciation follows.

As regards fat, .10 of the fat of the food is metabolized into a glucose equivalent and the .90 is available to be further oxidized for purposes of heat and energy, provided that enough carbohydrate is being used by the body to insure its complete oxidation into carbon dioxide and water. Otherwise, ketogenic bodies are produced.

In order that fat may be substituted for carbohydrate for the production of heat and energy, it is necessary that the ratio of fat to the carbohydrate which is actually being used in the body must not be greater than 1.5:1. If this ratio is exceeded acetone bodies are formed as an evidence that fat is smoking.

In cases in which it is hard to have the patient obtain a sufficient caloric yielding diet the additional calories obtained from each additional gram of fat metabolized are considerable since the metabolism of 1 gram of carbohydrate yields 4 calories and that of 1 gram of fat 9 calories.

So, a properly regulated dietary calls for a sufficient quantity of protein that wear and tear body tissue cells may be replaced. Excessive quantity is undesirable. Carbyhydrate food should be used to the extent to which the tolerance for carbohydrate as indicated by the sum total of the three contributing factors permits. Finally, depending upon the necessity to obtain additional heat and energy, fat may be used insofar as carbohydrates in the body are insuring the complete combustion of the fat.

Woodyatt has done much toward the application of a theoretical dietary in practical terms. A diabetic whose carbohydrate tolerance is not easily harmed does not try to the utmost the ingenuity of his physician as does one whose urine it is difficult to keep sugar free. Probably no mathematical formula will ever be compiled, the following of which will lead to the successful treatment of all diabetics. However, application of the chemistry of metabolism clinically to the problem of the dietary does help.

It is in connection with the best understanding of the dietary requirements of the individual patient that pancreatic extract may be most helpfully used. By this is meant that in order to help the patient it is necessary to know how much the patient can help himself. The amount of sugar in the urine at any one time does not necessarily indicate anything concerning the ultimate ability of the patient to burn glucose, but the amount of sugar excreted during a known time when the patient is on a constant diet of known value does tell something. If it can be determined what his need is then it is known where treatment must begin. A diabetic following the dictates of his own appetite or when he is improperly treated shows a glycosuria which is probably out of all proportion to his actual ability to burn carbohydrate when he is under proper treatment.

Present knowledge of the hypodermic use of pancreatic extract would indicate that, from a therapeutic and economic standpoint, it should be used in cases in which, under proper dietary regulations, the carbohydrate tolerance is low. The patient who can utilize his food to obtain as much as 2000 calories and have a satisfactory blood chemistry probably had best be content with present conditions.

Pancreatic extract, the trade name being iletin, as it is put out by Eli Lilly & Co., of Indianapolis, is an aqueous extract prepared from the adult pancreas of animals. It contains the internal secretions elaborated by the Islands of Langerhans. When kept cool it is fairly stable and will keep for at least seven weeks. Due to the preservative tricresol, it is quite painful for a few minutes when injected subcutaneously. It produces falling of the blood sugar content due to hydrolysis of the glucose of blood into glycogen in the liver and muscles. A fall of the blood sugar content begins in a half hour after each injection and continues, reaching its maximum effect in four hours' time.

Indicating that cellular oxidation is increased under the influence of pancreatic extract, it is found (1) the respiratory quotient is raised, (2) acetone bodies in lessening amount are formed in the urine.

Pancreatic extract or iletin is standardized according to the "unit" and put out in two strengths, one being twice as potent as the other. A unit is that amount of extract which induces the lowering of the blood sugar content of the rabbit from normal, which is about .137, to .045 per cent, which usually induces convulsions. One cubic centimeter of the weaker strength contains 5 units while that of the stronger contains 10 units.

In preparing to use pancreatic extract in treating a patient, it is best to know all that one can concerning the ability of the patient to utilize food. The carbohydrate tolerance, at least, is fundamental. Along with this frequent blood sugar estimations should be made, in order that, at the time of instituting treatment, it will be known what is the lower and upper level of blood sugar findings, that of a fasting condition and after the ingestion of the regular meal. The former is carried out by taking a specimen of blood for blood sugar determinations in the morning before the patient has eaten. In this way 12-14 hours has elapsed since the ingestion of food and the blood sugar percentage represents a low level. The latter is obtained by taking the blood sugar estimation four hours after the ingestion of the mid-day meal. The blood sugar level is probably at its height at this time of the day.

The degree in which the patient's blood sugar percentage is above normal, that is, above .08 to .12 per cent, helps in estimating what the amount of the initial dose of pancreatic extract should be. To give a dose that will cause the patient's blood sugar concen-

tration to drop below normal is a dangerous thing and necessitates the immediate provision of carbohydrate that is readily assimilated, such as orange juice or glucose given intravenously.

For this reason, when treatment is first begun blood sugar determination should be frequently made. Unless the blood sugar percentage is quite high the initial dose of pancreatic extract should probably be but a very few units. It is given fifteen minutes to a half hour before meals. When a blood sugar content about normal has been obtained through the selection of a proper dosage the carbohydrate of the food can be increased a few grams at intervals of 2-3 days until sugar appears in the urine. The dose of pancreatic extract is then increased. In this way can be built up gradually a dietary that is adequate in caloric content.

It is probably well to be reminded in thinking of pancreatic extract as a cure for diabetes that the word "cure," when used in a therapeutic sense, has its derivation from the Latin verb, *curo,* meaning: To take care of. In truth, treating diabetes does involve a taking care of every day.

As this method of treatment becomes further established much more will be known about it than is known today. One question of interest is "When followed during a long period of time, what influence has treatment on the inherent secretory function of the Islands of Langerhans at the time treatment was instituted? Is it increased, decreased, or influenced not at all? (1923)

The Anemias

J. L. LATTIMORE, M.D., Topeka

The topic "The Anemias" could cover much ground and yet bring out nothing of interest, so in this paper I will only take up and discuss briefly some of the salient features from a comparative standpoint of three types of anemias that we meet with rather commonly in our practice.

Certainly it is true that we are recognizing more cases of anemia than formerly. Whether it is because we are now closer observers, whether the patients come earlier or whether laboratory aids give us an insight to the condition, matters little; it is a fact that we see more, rather recognize more, anemias than formerly. Due to these facts probably all combined, we are obtaining a higher percentage of cures in the secondary anemias, while in the incurable anemias we are getting a longer period of prolongation of life with the attendant comfort and ease.

Pernicious anemia, with our present knowledge an incurable, fatal disease, takes the leading role of the different types of anemia. The mode of onset, by the very nature of the disease is slow up to a certain stage, at which time the patient is conscious of the fact that something is radically wrong and then consults the physician. It is a difficult thing to say whether the blood changes are the earliest symptoms or the spinal cord changes. I have examined patients that show very definite general blood changes, yet showing no spinal cord involvement of pernicious anemia, while on the other hand many cases present as the first noticeable symptom the cord involvement. For the greater per cent all cases presenting themselves for diagnosis and care have already undergone considerable general blood changes and a careful search will reveal a certain amount of sclerosis of the cord, evidenced by numbness and a tingling sensation in the fingers, hands, toes, etc. Other conditions associated with pernicious anemia are achlorhydria and glossitis.

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Coming now to the treatment side of these three anemias. In one condition, pernicious anemia, removal of the spleen appears at present to offer the longer life, with better health than any other therapeutic agent.

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(1923)

Recent Advances in the Treatment of Pernicious Anemia

RUSSELL L. HADEN, M.D., Cleveland, Ohio

Every clinician realizes how unsatisfactory has been the treatment of pernicious anemia. Many different drugs and methods of treatment have been suggested. Hydrochloric acid in large doses, arsenic and transfusion have stood the test of time as therapeutic measures of proven value. Conner has recently reported promising results from the oral administration of gentian violet and acriviolet. The measures employed have however, only aided in initiating or prolonging remissions. They have not materially altered the inevitably fatal course of the disease.

Most students of pernicious anemia agree that the disease must be of gastrointestinal origin. Numerous workers beginning with Herter have thought that poisons having an affinity for the hematopoietic and nervous systems may be due to the predominance of B. Welchii in the intestinal flora. The proof offered for this view is not convincing. The same may be said for the theory that certain types of yeasts may be the causative agent. The absence of free hydrochloric acid is a constant finding in pernicious anemia. It is most probable that digestion in the absence of free acid is constantly abnormal, especially with reference to the splitting of proteins and fats. It is quite possible that such is the source of the toxic bodies in this disease.

Clinicians have emphasized that patients suffering from pernicious anemia have often taken for a long time an incomplete diet. Bohan has especially called attention to the fact that there is commonly a protein deficiency over a long period. Patients sometimes give a history of taking an excess of fats.

Koessler, Mauer and Laughlin think that changes in the viability and permeability of the intestinal wall may be important factors. Certain products of normal digestion are toxic if introduced into the blood stream. Normally the intestinal wall is an effectual barrier to the entrance of poisons into the blood. McCarrison has pointed out the very striking changes which take place in the intestinal wall as the results of vitamin deficiency. Koessler, Mauer and Laughlin produced a marked anemia in the rat by feeding a vitamin deficient diet, which they think is due to altered permeability of the intestinal wall. They state that suggestive good results have been obtained in patients with pernicious anemia by feeding a vitamin rich diet.

Certainly the most promising results so far obtained from any method of treatment of pernicious anemia are those reported recently by Minot and Murphy. They have treated a large series of patients with a full protein diet including at least a half pound of liver a day. Fats have been much restricted, and fruit and vegetables supplied in abundance but liver is seemingly the most important item in the diet. The use of liver is thoroughly justified from experimental work since Whipple and Robscheit-Robbins found that it is especially valuable in hastening blood regeneration in dogs with experimental anemia.

It is as yet not clear whether the favorable action is due to the fact that liver is a complete protein or contains some specific antihemolytic factor. Conclusions must certainly be cautiously drawn since pernicious anemia often runs a bizarre course with frequent spontaneous remissions. Clinicians elsewhere are, however, experiencing equally good results as those reported by Minot and Murphy by the proper use of the diet suggested by the Boston investigators. There is uniformly a rise in the reticulocytes and a fall in the icterus index indicating there is more active regeneration and less active destruction of red cells with the liver diet.

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(1927)

Pneumonia—Its Management and Treatment from a General Practitioner's Standpoint

O. D. SHARPE, M.D., Neodesha

It is the importance of this subject, rather than the great skill of the writer that prompts him to bring up this subject for review and discussion at this time.

Pneumonia is one of the most common, as well as most dangerous diseases with which we have to deal; and its effects are often far reaching. Its treatment from textbook standpoint, and from most every point of view, has been so varied and remedies so numerous that it is hard to get settled on a line of treatment that seems reasonably satisfactory, and one that you can rely upon with confidence. My twenty-nine years of ups and downs with this disease has centered me on a line of procedure and treatment which for many years now has served me well and I believe is worthy of note.

In the first place, some cases seem hopeless from the beginning. Sometimes from the previous enfeeblement of the patient from various causes—concurrent diseases—extremes of age, etc., as well as too long neglect. Right here I want to say that it is important that we recognize this disease early or else err on the safe side and get busy at once, informing the attendants of your suspicions and impress them with the gravity of the disease and the importance of the closest and best co-operation from them. At the same time nudge yourself under the ribs that you let no grass grow under your feet. Here, oftentimes, is where we lose valuable ground, for if we do not recognize the disease and its gravity, who is going to recognize it? Then later, as the breakers come, you, as well as the attendants feel grateful that you grasped the thing early. Here again, keep close track of every detail of your case if you are going to treat it at all.

Realizing that our treatment is not all medicine, for we cannot force the disease out with heavy treatment, but must direct our medicine and management to the assistance of nature, and avoid with great care interfering in any way with nature's effort. Occasionally we hear and read of quick cures, but I am not here to advocate any of them at present, but to preach a sane and cautious handling which I believe will save many patients. . . .

Treatment

In the first place, do not try to force a break-up of the disease by excessive treatment.

One thing early in management is to remember the contagiousness of this disease and impress the attendants with this information. In discussing treatment I would like to take up pneumonia in young children first, as it differs in some particulars from that in older children and adults—then again from the really old.

Have the air fresh in the room as nearly as is practical, also some sunshine, not much, if any, stove heat, except in real cold weather, then steam in the air, keep shoulders and arms well covered—if real young, pin a blanket around them and keep it on day and night, skimp the diet, though they should have a reasonable amount of nourishment. I usually go slow on milk unless I am sure that it is digesting well and not causing fever. I try to keep the fever at or below 103 degrees. I first give a preparation as follows: To a solution of soda in a glass, I add moderate doses of aconite, gelsemium and belladonna. This is given every two hours when awake. The soda helps keep down or control acidosis, besides keeping up the supply of alkali, remembering that every tissue of the body including the blood, is alkaline. The only exception being the production of hydrochloric acid for a short time during stomachic digestion—then a waste product of acid in urine and perspiration. The other drugs mentioned have a restraining influence on the fever as well as stimulating respiration and the kidneys, besides also the effect on cough. I feel that this prescription helps moderate the severity of the attack and especially where acidosis is present. It makes the case milder.

In case the temperature is excessive, and child nervous and inclined to spasms, I keep, by spells, putting a cool cloth on the head, and sponging the back up and down the spine with tepid water, for five or ten minutes at a stretch, until the fever is kept within reasonable bounds; at the same time, of early mornings or any other time when the temperature is low, I give three or four doses of quinine, which helps control the fever and seems to help moderate the disease. However, I don't give much if any quinine if the temperature keeps at or below 103 degrees. In case of cyanosis and apparent collapse with smothering I usually use a fried onion poultice, which appears to be life-saving at times. When through with the poultice I replace it by greasing the chest well with quinine, lard and turpentine and cover the chest with a good warm cloth of wide dimensions and several thicknesses.

As the temperature moderates, after the first two or three days, and the case has been severe, I cut down

on the above vegetable drugs, and add the digitalis to support the heart, kidneys and secretions. Sometimes have to meet other emergencies, but by holding steady, and watching all corners, children will pull through a tough siege almost as well as a grown-up, unless it might be the very youngest.

In the older children and grown-ups, much the same line of treatment is used. When I find my patient is a poor hand to keep the chest, arms and shoulders well covered, I have him put on a coat or sweater for they need that protection and it should be continuous even after the fever is gone. Older people are just as hard to keep covered as children, for many of them are in the habit of sleeping with arms out. But on account of the proximity of these parts to the seat of the disease, I think it very important to keep them well protected.

Keep bowels active, light diet, not much sweet milk while temperature is high—buttermilk is much safer, and it is usually liked better.

My soda solution is used in proportionate doses every two hours, and if the case is severe, and there seems to be strong indications of acidosis, I have them drink soda water several times daily in addition to the prescription. If fever is excessive, I give 10 to 15 grains of quinine of mornings or at a time when the fever is at its lowest ebb, and keep it up for three or four days, for as a rule that will cover the period of excessive pyrexia. I avoid if possible, coal tar products in controlling fever, as I believe it is dangerous, except when there is a good deal of nervousness and temperature is not reasonably controlled by the above remedies. Then I give an occasional small dose to help moderate the excessive temperature, and at times, at the time of break-up, if it is hard to start perspiration, a dose or two seems to give nature a hint and a boost that has seemed to help. After the first three or four days your excessive temperature gives way to a moderate one and often only a little, at the same time more stupor and delirium with very dry tongue and sluggish secretions with scant amount of urine. At this time I usually start digitalis, enough to steady the pulse, stimulate the kidneys and secretions, and hold patient's strength without trying to force matters, and await the break-up.

At times we have so much delirium and of such furious type it becomes necessary to add a little bromide and maybe a little chloral, too, but if moderate doses don't seem to settle it, then I give alcohol or whiskey if available, and in sufficient quantity to quiet, which it usually does nicely. Whatever you do, conserve the strength of your patient, even to the using of a bed pan. You will usually come out alright even with the quite old.

Sometimes you find patients who have a sick stomach and can't keep any medicine, it may be for several days. In such cases I suspect acidosis and use either enemas of soda water with other medicine if necessary, or may use Murphy's drip, to keep them from drying out too much, etc., until at such times as they can use the stomach. Also use hydrotherapy to control excessive temperature.

If having much pain or pleurisy, I usually depend upon Dover's powder, hot cloths, etc., seldom a poultice, sometimes a hot bran sack.

In these latter cases, when the break-up comes, and the temperature doesn't come down entirely, and sweating continues, I watch carefully for empyema. Don't remember to have seen a case where I didn't have considerable pleurisy.

Again, occasionally we get a case that may come nicely to the break-up, sputum loosens and comes up, etc., and the fever may waver some, then settle back and may even come higher, for a time, then look for wandering or double-pneumonia. It may be you remember your patient had a late chill, if so, add seven days to that time and hold steady for the final break-up, which will usually come nicely the same as the first one.

Occasionally you will have a case where the clearing up is not complete, but keeps a little fever and cough, sweats, etc., and if no empyema, your case is likely of tuberculous tendency or maybe only of slight empyematous output, which is slow to clear up. Keep your patient in bed—fresh air, plenty of cover, nourish well, tone up and wait. If you let this patient out, you are likely to have it end in T.B. If your patient can ever be cured, now is the time, so hang on for every interested party is dependent on your judgment.

The Very Old

Have had quite a few cases of this kind that seemed to present a different line-up.

Many of these cases start from what appears a prolonged cold—for old people with weak hearts and low vitality rid themselves slowly from a cold, and with difficulty. The real old will have a pneumonia with very low temperature and if you are not suspicious you will not notice it until too late. Suspect it early, inquire for delirium and other indications and get busy for you are likely to lose out. Yet, with due caution and care, many of these will come through. In fact, I have come to look with doubt upon some statements I used to hear—that the old are living on borrowed time, and that it matters not. Don't kid yourself to inactivity with this idea, but fight it through on its merits, as though you expect them to get well and they will often do it.

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(1924)

"The Roaring Twenties"

A typical experience on Kansas Highways in 1924.

National AAU Basketball Champions, 1925, Washburn College.

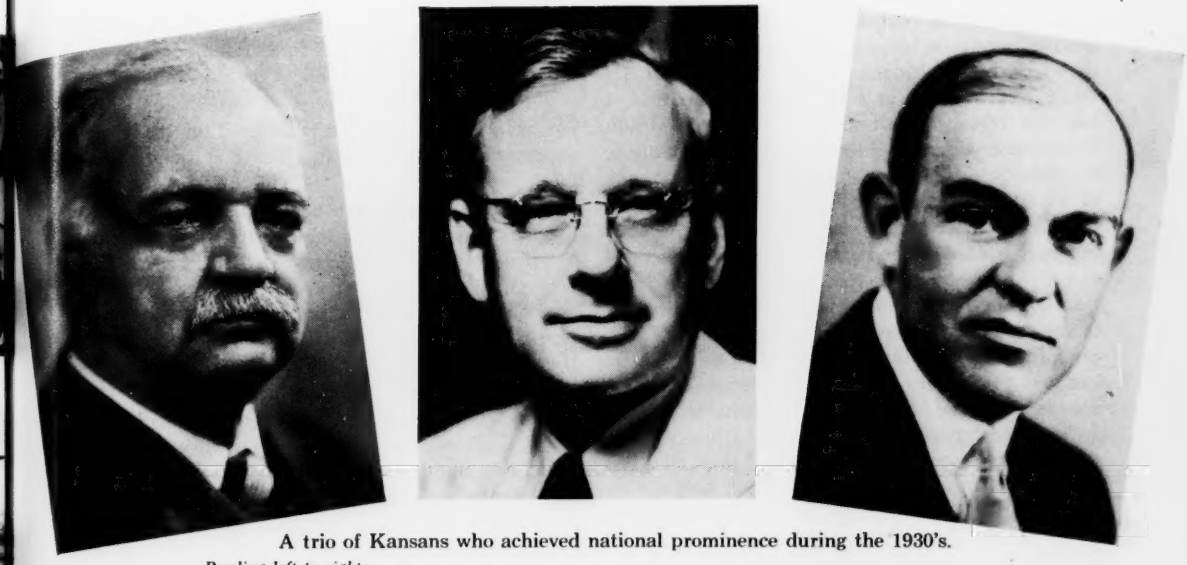
Walter Beech flying Travel-Air airplane. This was the first plane built by the Travel-Air Company, predecessor of Beech Aircraft Company, (1924).

Fort Hays Normal School, "Bloomer Girls," (1925).

Former KSAC President Jardine, being sworn in as Secretary of Agriculture, (1925).

Walter Johnson, "The Big Train," a Kansan who was at the peak of his career with the Washington Senators in the early 1920's.

—And "The Trying Thirties"

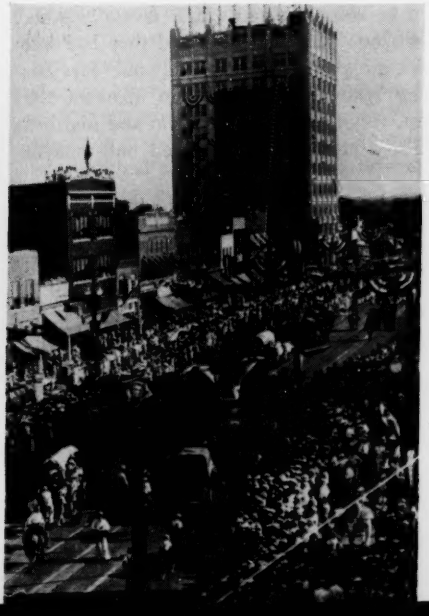


A trio of Kansans who achieved national prominence during the 1930's.

Reading left to right:

Charles Curtis, Vice-President of The United States, 1928-1932; Alfred M. Landon, former Governor of Kansas and candidate of the Republican Party for President of The United States in 1936; Harry Woodring, former Governor of Kansas and Secretary of War of The United States from 1936-1940.

A view of the Landon Notification Parade in Topeka, (1936).



Amelia Earhart Putnam, nationally known aviatrix from Atchison, Kansas. Vanished in 1937, while on an extensive flight over the Pacific.

An Epidemiological Investigation of Jamaica Ginger Paralysis Cases

EARLE G. BROWN, M.D., Topeka

During the latter part of February, the public press carried news items from various sections of the state, relative to the prevalence of numerous cases of paralysis which had developed following the use of Jamaica ginger extract as a beverage. Subsequently, a few case reports were received by the State Health Department, although rules and regulations provide for immediate notification if unusual numbers of cases of uncertain or indefinite etiology develop. Therefore, in order to determine the actual number of cases of paralysis which had occurred, a letter was addressed to each city and county health officer on May 2, requesting him to immediately report the total number of cases that had occurred in his city or county. Replies were received from each of the health officers and 690 cases were reported. Supplemental reports received from the health officers indicated that a majority of the patients afflicted had used Jamaica ginger extract as a beverage for a number of years. For this reason, it was our opinion the paralysis had not resulted from the use of the ginger alone. "It soon became evident, therefore, that the condition must have resulted from some unknown poison or from some known poison whose pharmacologic action was so altered through the ginger or the alcohol, or both, as to render it unrecognizable, which poison in some way got into a manufactured lot of so-called U. S. P. fluid extract of ginger at a relatively recent date."

In order to determine the relationship of ginger to the development of the paralysis, case histories were secured of 113 patients. These histories were secured and the patients examined by representatives of the state, city and county health departments and physicians in private practice co-operating with the state health department. The period of onset ranged from February 10 to April 5, the greater number occurring during the last two weeks of February and the first two weeks of March.

Case reports were received as follows: City of Wichita, 402 and Sedgwick County, 23; Butler County, 64; McPherson County, 30; Cowley County, 22; Saline County, 19; Lincoln County, 15; Norton County, 14; Marion County, 11; Sumner County, 9; Ellsworth, Kingman and Russell counties, 8 each; Ford County, 7; Reno County and City of Hutchinson, 2 each; City of Topeka and Shawnee County, 2 each; Montgomery County, 4; Harvey County, 4; Clay and Barber counties, 3 each; Jewell, Osage, Morris, Lyon, Elk, Wilson and Rush counties, 2 each and 1 from each of Clark, Cloud, Crawford, Bourbon, Labette, Meade, Mitchell, Pottawatomie and Rooks counties.

All of the patients interviewed were of the white race with one exception. It is believed this ratio was approximately the same for the total of reported cases.

The great majority of patients afflicted were males, the ratio being approximately twenty to one. Of the 113 patients interviewed, five were women and ranging between nineteen and twenty-nine years of age. The age of the youngest male reported was given as seventeen years. One hundred of the 108 men were over thirty years of age, seventy-two of them in the age group between thirty and forty-nine years.

Fifty of these patients admitted they had used Jamaica ginger only, as a beverage, while fifty-nine stated they had used Jamaica ginger, bootleg whisky or alcohol. One patient stated he had used only alcohol and three denied the use of Jamaica ginger or other alcoholic substance as a beverage. One of these men, however, did admit he had used one teaspoonful of Jamaica ginger extract for the treatment of what he termed a "stomachache" and a second admitted the use of a cup of ginger tea for the treatment of a stomach disorder. Only two of the patients interviewed, therefore, did not admit having used some form of ginger previous to the development of the paralysis.

The period of onset of the paralysis following admitted use of the ginger extract ranged from two days to more than twenty-one days. The average time appeared to be about fourteen days. Histories were secured from nine patients who stated they had last used Jamaica ginger more than twenty-one days before the first symptom developed. In many of the cases, nausea, vomiting, abdominal pain and diarrhea occurred. This condition usually lasted only one or two days.

Only seven of the patients stated the paralysis had not interfered with the performance of their usual duties. Although unable to work, because of the paralytic condition, thirty-seven had not been confined to bed. All other patients, according to information received, had been confined to bed for periods varying

from one to twelve weeks; fifty-six averaging approximately five weeks confinement to bed at the time the histories were secured.

The symptoms and physical findings were remarkable in their uniformity. The quantity of Jamaica ginger consumed, apparently was not a deciding factor in the development and extent of the paralysis. As previously stated, one patient gave a history of having used a single teaspoonful of the extract, yet developed a definite paralysis of both legs with foot drop and partial paralysis of both forearms and wrist drop. Almost without exception, when a patient was asked as to what symptom he noticed first, he would reply by taking hold of the calf of his leg and saying "cramping pains in here." In the majority of cases, the "cramping condition" was present from two to five days before the paralysis developed. Many patients stated they realized paralysis had occurred when they were unable to move their toes and their "feet flopped" when they attempted to walk. Patients who developed paralysis of the arms and hands complained of similar "cramping pains" in the muscles of the hands and forearms, although of lesser degrees. These pains occurred on an average of seven to ten days after the muscles of the legs were attacked. Upon examination, the disability of the hands and forearms was never so marked as in the feet and legs.

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(1930)

Editorial

Changing Views in the Treatment of Goiter

ARTHUR E. HERTZLER, M.D.

There is a marked shifting of viewpoint among surgeons as to the indication for operation on goiter and particularly as to the amount that should be removed.

Until recently the chief indication was the relief of toxicity, and the measure of this toxicity was the basal metabolic rate. If the toxicity was relieved the operation was pronounced a success. If the toxicity returned another whack at the goiter was indicated.

Cosmetic considerations sent some persons to the surgeon. The goiter, in their minds, caused no trouble but the bulge in the neck was unsightly. This applied chiefly, of course, to young persons for whom the great adventure was still only a hope. The young matron was much less sensitive to a deformed neck.

It took definite pressure disturbances to send the usually aging matron to the surgeon. This viewpoint is undergoing a rapid change. This change is due to two factors: It has become generally recognized that the supposedly innocent goiter which never has shown toxic symptoms nor ever experienced any pressure annoyances may cause—in fact they are certain to cause —a terminal cardiac failure. This relation to cardiac disease has caused some surgeons to do a complete removal of the thyroid gland for so-called intrinsic cardiac disease.

Whatever the result of operations on the thyroid may be on diseases of the heart, it has produced a general recognition that the thyroid is not as essential to the welfare of the patient as we were wont to believe. That the thyroid is of little use to the adult is quite startling but sufficiently demonstrated beyond a doubt.

We are presented therefore with two new factors: The recognition that a simple goiter is leading the patient to certain terminal cardiac failure and that the patient will get along very well without any thyroid gland at all comes as a happy combination. The excuse for operation together with a technically possible operation, makes a most pleasing combination for the surgeon.

Like most pleasant things there is a fly in the ointment. In young persons complete "ectomy" produces disturbances in development and nutrition. As a general rule the age of twenty-five years may be accepted as the dividing line. In the very toxic diffuse goiters very radical operations are inexpedient making lobectomies or partial resections advisable.

It is in the colloid goiters that the very radical operations are chiefly indicated. In such cases the least one can do is to remove every lobulation and visably affected part of the gland. If this rule is followed there remains usually only a bit of thyroid tissue, the size of a Boston-baked-bean at the upper poles.

The amount usually left in operations for toxic goiter is the size of a little finger on either side. This diseased tissue results after a recurrence of toxic

symptoms, in many cases not until five or ten years later. This is well understood because the returned patient emphasizes it. The point not sufficiently emphasized is that even though toxicity does not return the remaining part of the gland is sufficient to produce fatal cardiopathies. This is even more important in colloid goiters which have never shown toxicity. In such cases the remaining part of the gland may not emphasize its presence through its size and one must wait ten or twenty years for the appearance of a failing heart, and when this time comes the relationship is likely to be overlooked.

Therefore a goiter in the adult is to the patient a menace, no matter whether it has shown toxicity or not, and tends ultimately to cause death from cardiac failure. (1935)

Laboratory Control in the Use of Sulfanilamide (Prontosil)

J. L. LATTIMORE, M.D., Topeka

Considerable data has been accumulated, both experimental and clinical on the use of sulfanilamide in the treatment of various coccal infections. At present it appears to have its greatest value in the treatment of hemolytic streptococci, however various reports have been published stating that the drug has definite therapeutic beneficial effect upon pneumococcal, meningococcal and gonococcal infections. In 1915, Foerster claimed good results from the drug in staphylococcal infections, since then various claims have been made for its value in typhoid, para-typhoid, urinary and dysentery infections.

With the wide use of the drug, there will be a tendency not to consider many important factors, such as toxicity, individual susceptibility, contraindictions, ample dosage, proper diagnosis and mode of action of the drug.

The drug has a rather low toxicity, no fatalities having been reported to date. It does produce a moderate cyanosis, a mild depressing effect and a low grade fever. The drug is distributed throughout the body and is found in all fluids, including the urine, gastric contents, bile, pancreatic juice as well as the blood.

Individual susceptibility has not been described in the literature so far as I know. Experience with other drugs within the past few years will at least serve to warn us against the indiscriminate use.

The main contraindiction in the use of sulfanilamide is nephritis. Certainly in grave infections, one at times disregards complications. As a rule however, the patient should be checked for possible nephritic changes, the blood urea being the first of the nitrogenous waste products to be retained, would indicate that the blood urea should be a routine in all cases that are to use sulfanilamide.

Acidosis is another complicating factor. A check on the carbon-dioxide combining power of the blood should also be a routine. A combining power of less than forty-five volumes per cent, should first have the acidosis corrected. As a routine, most physicians administer sodium bicarbonate with each dose of sulfanilamide. One of the complicating conditions observed in some cases is a rash, identical in appearance to measles. This rash appears about the ninth to tenth day and disappears within about thirty-six hours.

Ample dosage of the drug appears to be of vital importance. As a rule, the average size individual will require about sixty grains as an initial dose to obtain a blood level of ten to fifteen mgm. The only way that this can be controlled is by blood sulfanilamide determination. The test is not especially complicated but fresh solutions are essential. In children the usual dosage is about half that for the adult. Probably the drug deteriorates upon standing for several months, accounting at times for failure of obtaining the desired blood level.

Certainly, no drug has been developed within the past few years, unless it is insulin, that requires a closer laboratory control than the use of sulfanilamide. First and of great importance, is the correct bacteriological diagnosis. As a routine, I have found brain-broth to be the most satisfactory medium for blood culturing. Some streptococci grow rather slow, all cultures should be carried for at least three weeks. It is also important to make repeated blood cultures in those cases that give negative results. Upon completion of the use of the drug, blood cultures should be made for seven consecutive days.

Summary, Laboratory Aid

Correct bacteriological diagnosis.
Control of acidosis with CO_2 determinations.
Determination of nephritis.
Control of blood sulfanilamide. (1937)

Letters from a Kansas Doctor to His Son

JOHN A. DILLON, M.D., Larned

My dear Boy:

I am feeling in a very chastened mood this morning and I fear this letter will probably be a rather humble document. You naturally ask, how come? So I will unburden myself. As no doubt you are aware Contract bridge has spread its deadly tentacles about us out here as it has in all the towns and villages of the state. Ely Culbertson has taken the place of the family Bible, "Good Housekeeping," and "Advice to Expectant Mothers." Lydia Pinkham's Vegetable Compound literature in all its intimate glory was never devoured as are the works of Ely today. Housewives who only got to the second year in high school and never could remember the capital of Washington, D. C., are taking Contract lessons Tuesdays and Fridays and attempting to memorize 380 pages of hints to bridge players. Dishes go unwashed and babies gurgle in uriniferous environment while mothers discuss bridge over the back fence. This has been almost exclusively a ladies' obsession but a few of my moron male friends are also taking it seriously. That is they think they are until they run up against the ladies who have consecrated their lives to the calling. Then they fall flat.

Very few men are good cooks because they cannot see the necessity of accurately following word for word and measure for measure a recipe containing fifteen ingredients meant to ultimately become a cake or piccalilli. But a woman can do this without an effort and incidentally, while doing this answer four telephone calls and make five of her own. By the same token she takes her bridge just as literally and just as seriously. Sooner would she cut off her right hand honor tricks. A few months ago Ely was a bit more than open two spades with less than five and one-half liberal and permitted this opening on four and one-half honors, but in his last regular monthly edition he probably was being scratched by his winter flannels and in a moment of irritation raised the requirements. But does the bridge fanatic mind this? Not on your life.

A woman may go to sleep Sunday night eminently satisfied with her Contract and wake up the next morning to find her bridge knowledge as obsolete as a bustle or a long tube nursing bottle. Ely justifies these changes of late by a sort of psychoanalysis philosophy. He says one should take into consideration the temperament, disposition and habits of the partner and modify the bidding accordingly. For instance if you are playing with a spinster not vulnerable from any angle and she crisply bids one heart after counting the honors on her fingers three different times one may safely assume the lady has two and one-half honor tricks at least. On the next round of bidding she will enumerate her playing tricks in the same manner so that every player knows she is bidding consistently. In playing with this type of individual and assisting her bid to game I usually feel like laying my dummy hand down and silently slipping under the table until the first shock is over. Again Ely says if you have as a partner a moon-faced loud laughing restaurant man who opens the bidding with the jack and five small clubs do not get excited even if you have three honors in your hand. In other words this eminent authority urges that the bridge player who seeks to become adept at the game should learn besides the 380 pages of instruction the habits, family history, and complexes of the players with whom he consorts. No man who has a business to look after and an overdraft at the bank can hope to do this.

All this has been written you leading up to the explanation of the chastened condition in which I find myself. I went with your mother to a bridge party last night with good will toward all men. I shook hands with the hostess and beamed right and left on entering the room. I even cracked a joke and laughed appreciatively when no one else was inclined to do so. There seemed to be something strained in the atmosphere which I could not understand until the duplicate bridge boards were produced. Then I realized the ladies were bent on showing up the novices in the pastime. As you probably know in duplicate a board is played at one table and the same board passed to the next table. As the evening wore on I was astonished and chagrined to note the comparative score I was making. After triumphantly negotiating a bid of two diamonds I would discover the previous players of the same hand had made a small slam in spades. In the estimation of my opponents I sank lower and lower in the scale of intellectuality and partners drew to one side after each game and talked in low tones while looking sidewise at me. In desperation I feebly attempted another funny story which also failed to register. While nervously reaching across the table for a cream pitcher I upset my coffee in a woman's lap. It was hot coffee and naturally it annoyed her. Your mother, good soul, attempted to defend me as usual by telling of the attack of Flu I had last spring which some thought was brain fever. The hollow cough I gave now and then substantiated the fact there was also a physical reason for my poor showing. My spirit was broken

and I wended my way home wondering when the authorities would find out the horrible mental deterioration that had taken place and insist on doing something about it. I hadn't the nerve to put the cat out as has been my custom at night but quietly slipped into bed. My sleep was fitful and disturbed. I dreamed that I was a grand slam in wild pursuit of a bridge amazon who fled desperately as I tried to murder her with eight honors which I brandished over her head. I awakened in a cold sweat, took some calomel tablets and went back to sleep. As I said before this is the day after and I must confess to a pronounced hangover.

There was a time when friends met together in homely fashion, played cards, chatted about the baby's tooth or the reason for the poor results in the last batch of home brew. All this has changed. There are still the purring amenities when guests arrive and voluble protestations of an enjoyable evening when they depart. But in the *interim* while the battle rages the cold blooded intensity is a thing to marvel at. It is no place for fiancées, and husbands and wives are very apt to drift further apart. Depression may come and go but no dyed in the wool contract player will give it a passing thought when a glance at his thirteen cards shows three aces and a couple kings. Maybe more people should play the game. Maybe I am morbid and not fit to judge its merits. Be that as it may, sometime I hope to meet this man Culbertson face to face. When I do my present plan is to snarlingly throw myself at him and bite a chunk out of the calf of his leg. On second thought I can see that this would do no good. Possibly I had better admit a fact that few men care to admit and that is the women are just too durn smart for us.

Love,

DAD.

P. S. This last sentence will please your mother who by the way is a keen student of the game. (1934)

The Insanity of Hamlet*

C. F. MENNINGER, M.D., Topeka

Life in all its forms, physical and mental, morbid and healthy, is a relation; its phenomena result from the reciprocal action of an individual organism and of external forces; health is the consequence and the evidence of a successful adaptation to the conditions of existence and imports the preservation, the well-being and development of the organism, while disease marks a failure in organic adaptation to external conditions and leads to disorder, decay and death. The harmonious relation existing between the organism and its environment which is the condition of health may be disturbed either (1) by a cause in the organism; (2) by a cause in the environment, and (3) by cause or causes in both. We hear it often said that a person's mind is broken down in consequence of adverse conditions of life, social or physical. In all these cases it can very certainly be presupposed there was a weakness in the nerve element either inherited or acquired, which has cooperated. For were the nervous system without flaw or infirmity—in a state of perfect soundness and in possession of that reserve power with which it does adapt itself within certain limits to the ever varying external conditions, it is certainly not likely that unfavorable circumstances would be all sufficient to so disturb the relation as to initiate mental disease. What we desire to emphasize is that external causes alone very rarely produce mental disease, but where there is a concurrence of causes, arising partly within the organism and partly without—an unfavorable action from without conspiring with an infirmity of the system within, establish in the largest percentage of instances that disorder and discord known as insanity. And this applies not alone to insanity but to all diseases to which human flesh is heir. Why do not all persons take consumption? Why do some experience an immunity to infection from any contagious disease? Why are not all persons infected with parasites? It is explained by the same biological law that gives us the reason why a clay bank will not grow sweet-potatoes and an ashpile raise earth-worms. Great mistakes are very often made, even by men of culture in fixing upon the supposed causes of disease in particular cases. A single prominent event is selected as in itself effective to explain the whole disaster, when that event alone was perhaps merely one in a whole train of causes. A series of external events in concurrence with steadily operating conditions within—but not a single event—an accident, a sorrow, or need or adversity—can alone be regarded as adequate cause for insanity. When we are told that a man has become insane or mentally deranged by sorrow: we

* Read before the Saturday Night Club, at Topeka, Kansas, October 18, 1890. It is interesting to note this paper was prepared and given by a physician before the birth of two sons who later entered psychiatry.—Editor.

have not sounded the cause if we stop there. How is it that another who undergoes an exactly similar adversity or one of even greater degree does not go mad? The entire causes could not possibly have been the same where the effects were so different.

The germs of insanity are often latent in the foundations of the character—may reach back through a lifetime or have its root in the foregoing generation. Man gets much from his parents in addition to the spark of life. His father, his mother, his grandfather, his grandmother, are latent and declare themselves in him: and it is on the lines thus laid in his nature that his development will proceed. It is not by virtue of education so much as by virtue of inheritance that he is brave or timid, generous or selfish, prudent or reckless, boastful or modest, quick or placid in temper. What would you think of a child's nervous make-up and mental equilibrium whose mother upon the sudden death of her husband whom she loved to extremes, would marry in indecent haste her late husband's brother by name but not in quality of person or character? Would it be likely that we would find a well balanced mind in the son of this mother who would urge him to join in her marriage festivities and rejoicings "Ere yet the salt of most unrighteous tears had left the flushing in her galled eyes." What could a son inherit from his mother who would marry within a month her husband's, his brother's, murderer? He may have received a high degree of culture from his schoolmasters but his inheritance from his mother offsets all training in his mental sphere. Breed has a more vital influence on character and mentality than training or culture. We look to the tree for fruit after its kind and we cannot be persuaded that grapes will ever grow on thorns or figs on thistles.

Facts which establish the reality of insanity beyond a doubt in the opinion of medical witnesses who have spent years in the observation of the insane have been time and again questioned and argued to be mere feigned or simulated symptoms and capable of being explained without resorting to the theory of insanity. The celebrated trial of Abner Rogers in Massachusetts is one in point. In this case the facts proved beyond all doubt that he was insane, yet the prosecuting attorney sinking under the difficulties of a bad case, disposed of the facts by arguing and proving that these symptoms were not real but only feigned. Can simulation of insanity be detected? The common opinion is, among those who are at all qualified to form such an opinion, that sufficient opportunity being given simulated insanity can always be detected by those who have such practical knowledge of the disease. Was Hamlet insane or was he a mere simulator?

> "How strange or odd soe'er I bear myself—
> As I, perchance, hereafter shall think meet
> To put an antic disposition on—"

These three short lines have been productive of much mischief—much argument. It is a clever bait and many a fish that swam classic seas thoughtlessly bit at it and was caught. Dr. Johnson could see in the madness of Hamlet only a provocative of mirth; and even Coleridge profoundly as he discoursed on the various springs and forms of human thought, regarded it as a clever sham, used for the purpose of concealing a real design. Until within a few years, Hamlet's derangement was almost universally regarded as feigned. Aside from his own intimation after meeting the ghost it is difficult to conceive of any foundation for this opinion. And yet it would seem as if the strongest and clearest reasons alone could warrant the idea that the most faithful delineation of a disordered mind ever made by man represents a deceptive counterfeit, not a truth and a reality. Without a single adequate reason, this notion has been handed down, like an heirloom from one critic to another, unquestioned and apparently unquestionable in the very face of the fact that Hamlet's insanity, which is supposed to be assumed for the purpose of concealing his plans, immediately excites the apprehensions of the king and leads to his own banishment from the state. A most perverse ingenuity has been exercised in endeavoring to reconcile some passages in Hamlet's conduct with the admitted qualities of his character and the ordinary springs of human action. Hamlet's disorder is often manifested under circumstances that forbid the idea of simulation.

Because of an inability to discern the essential distinctions between real and feigned insanity we believe many critics have been loath to abandon the old views of Hamlet's mental status. To extenuate their position they say it was not Shakespeare's endeavor to represent a case of genuine disease when confronted with some passage that could hardly be feigned and assert that it only proves the poet's great power of imitation. Although Shakespeare's intellect was an overmastering power which still recoils from its encumbering clay, critics attribute quite too much to him because there are many traits of the real disease that defy the utmost efforts of mimicry to simulate. The perversion of the moral affections, the sincere and solemn earnestness with which the patient announces and asserts his delusions, that particular train of thoughts, so difficult to describe, but so characteristic of insanity —all these are traits as far beyond the power of the simulator to imitate, as the quick pulse, furred tongue and dry skin of its more recent and acute forms. Then, too, critics overlook the very purpose of feigning. It is to deceive, to hoodwink the spectator into the belief of something that has no real existence. Hence only such traits of the disease are exhibited which would make the strongest and best impression and all those most carefully avoided that are least often noticed and those that would pass in the world

for something else, such as eccentricity, bad humor or low spirits. The purposes of the simulator require that the traits he assumes should be obvious immediately and so he forces them on the attention with no regard to pathological propriety or to any principle of subordination. That Shakespeare bore this distinction in mind in the present instance, is obvious in every scene of the play. All can recognize insanity in one who raves or utters gross delusions, but few can see it in Hamlet's scorching rebuke of his mother, in his harsh treatment of Ophelia, in his murder of Polonius, in his famous soliloquy on death, or in his welcoming address to his old schoolfellows. In much of this conduct and discourse most persons would see nothing more than an extreme acerbity of temper, an early experience of the hollowness of life and at worst perhaps, a fit of depression.

The theory of insanity will explain very satisfactorily all difficulties which have received such various solutions. The character and conduct of Hamlet are in the strictest accordance with the principles of human nature. Hamlet was no automaton but a living human soul and as in the case of most distinguished men, his character is not so easily read. The integrity of every train of thought is marred by some intrusion of disease—the smooth deep current of his feelings is turned into eddies and whirlpools under its influence and his solemn undertakings conducted to an abortive issue. His clearest perceptions, his holiest purposes, his strongest determinations, are followed by the doubts, apprehensions and scruples that torment and distract the disordered mind. While his whole soul is occupied with the idea of revenge, he is ever finding excuses for postponing the moment of execution, constantly turning from his purpose by the merest whim and justifying his conduct by reasons too flimsy to satisfy any but a disordered intellect. His very remark "to put an antic disposition on" on which the theory of Hamlet's insanity being feigned is mainly founded, indicates at most but an indefinite half-formed resolve to accomplish a purpose by simulating a disease that was really overshadowing his spirit in all its fearful reality. The final event, the crowning catastrophe of the piece most aptly finishes the story of Hamlet's irresolution, his vacillation, his forereaching plans, his inadequate performance. The nearest object of his heart—the revenge of his father's wrong —is at last accomplished, but by means of a contrivance he had no part in affecting. Such is the nature of insanity—to talk but not to act, to resolve but never to execute; to support the soundest projects for action by the most imperfect performances.

Hamlet's interview with Ophelia, as described by herself, exhibits in it some of those exquisite touches that always distinguishes the genuine from the false. Here Shakespeare is poetically, dramatically and pathologically true to nature and science. In this interview the indications of derangement are confined to looks, gesture and demeanor. Not a word escapes his lips but a language more expressive than that of the voice betrays the violence of his emotions. We see him in a sudden paroxysm of his disorder that renders him heedless of his personal appearance, obeying the instincts of his affections, and making his accustomed way to her whose love had shed a radiance over his opening prospects. In a tumult of strange and contending emotions he has lost the power of speech, for he had already lost the power to think and feel like himself. He can only gaze into her face as if to penetrate into the mystery that surrounds him and then heaves a convulsive sigh that threatens to end his being. Such is madness and such scenes as this and others that subsequently occurred between Hamlet and Ophelia have happened a thousand times in real life, where the insane lover thrusts himself into the presence of his mistress with pallid face, piteous look, knees knocking each other, hatless head and downgyved stockings, only to frighten and distress her by the painful exhibition of clouded intellect and disordered affections. All this interview may be said to be entirely compatible with the theory of simulation, but when we behold Hamlet and Ophelia in their next interview so remarkable for his outrageous cruelty and harshness of conduct and language we are as little inclined to believe all this to be a well acted sham as we would the wail of a newborn infant or the hectic flush of a consumptive. Can you see in this pretended madness as Dr. Johnson did, a cause for much mirth? No, you do not laugh nor even smile to see so fair a lady as Ophelia treated in so harsh and unfeeling a way, even for the purpose of simulation. Commentators who hold that Hamlet feigned madness never explain this passage—indeed it cannot be explained by their theories. The most natural theory and the only one that can throw any light on it and which makes it so plain after being once suggested reveals it to all that Hamlet is insane. His conduct in this interview on the theory of insanity is perfectly in accord with the symptoms of this disease. Insanity brings a change over the warmest affections of the heart, whereby the golden chains wrought by love and kindness are utterly dissolved and the forsaken and desolate spirit, though it continues among men, is no longer of them.

The Darkened Mind

The fire is burning clear and blithely,
Pleasantly whistles the winter wind;
We are about thee, thy friends and kindred,
On us all flickers the firelight kind;
There thou sittest in thy wonted corner
Lone and awful in thy darkened mind.

There thou sittest; now and then thou moanest;
Thou dost talk with what we cannot see,
Lookest at us with an eye so doubtful,
It doth put us very far from thee;
There thou sittest; we would fain be nigh thee,
But we know that it can never be.

We can touch thee, still we are no nearer;
Gather round thee, still thou are alone;
The wide chasm of reason is between us;
Thou confutest kindness with a moan;
We can speak to thee, and thou canst answer,
Like two prisoners through a wall of stone.
Hardest heart would call it very awful
When thou look'st at us and seëst—O what?
If we move away, thou sittest gazing
With those vague eyes at the selfsame spot,
And thou mutterest, thy hands thou wringest,
Seeing something—us thou seëst not.

Strange it is that in this open brightness,
Thou shouldst sit in such a narrow cell;
Strange it is that thou shouldst be so lonesome
Where those are who love thee all so well;
Not so much of thee is left among us
As the hum outliving the hushed bell.

—Lowell.

In no instance are these views so strongly confirmed as in this remarkable scene. Notice the rapid transition so characteristic of the insane. First calmness and courtesy followed by torrents of abuse, denial of affection, extravagance and perversity. Then the most tender emotions as she flits before him. And when she returns the gifts she had received from him with a mere intimation that he had ceased to love her, quick as a flash jealousy, the arch-demon of hell with his loyal cohorts, mistrust and anger run riot through the avenues of his brain. Words of gall and bitterness are poured out upon the fair Ophelia whom he loved with more than the love of forty thousand brothers. Feelings of doubt, indifference, hatred, contempt and loathing are thrown like a thousand poisoned arrows into her tender breast; and the tenderness of a lover, the courtesy of a gentleman have been transformed into the bitterest of bitter hatred, perversity and ill treatment. Is there anything laughable in this laceration of feelings and outraging of dignity? Or anything warrantable as a clever sham to hide a real design? How unnatural and unwarrantable it would have been in Hamlet had he been acting a part, is obvious enough from the disposition of critics to regard it as a fault in the author. The fury and extravagance of mania, the moodiness of melancholy he might sucesssfully mimic; but to do violence to his affections, to desecrate and trample upon the idol that he had enshrined in his heart of hearts—this was beyond the power of mimicry.

Shakespeare had closely observed and studied such aberrations from the normal course of the affections and saw in them that kind of poetical interest which master-spirits like his are apt to discern in the highest truths of philosophy. His delineations of insanity unfold many a deep truth in mental pathology. Maudsley says of him: "I am apt to think that we may learn more of the real causation of insanity by the study of a Tragedy like Lear than from all that has yet been written thereupon in the guise of science." Ray says "Few men, I apprehend, are so familiar with those diversities of mental character, that are in any degree, the result of disease, as not to find the sphere of their ideas on this subject somewhat enlarged by the careful study of Shakespeare."

. . . . .

(Presented 1890, Published 1934)

What Is Dementia Praecox?

KARL A. MENNINGER, Topeka

As the mystery of ancient medicine was fever, which we now know to be chiefly the product of infection, so the mystery of modern medicine is, I suppose, cancer. Correspondingly as the mystery of early psychiatry was epilepsy or convulsions, which we now know to be chiefly due to brain cortex injury or irritation, so the mystery of modern psychiatry is dementia praecox.

Prevalence

Dementia praecox is a disease that deserves the attention of every medical man. There are at the present time in the United States 125,000 in the custody of state hospitals, and it is safe to say that there is an equal number outside the walls of the state institutions. This is a far greater number of cases without doubt than the combined total number of cases of brain tumors, spinal cord tumors, pelvic cellulitis, placenta previa, inverted uterus, and other similar topics for today's consideration of this society.

In the state of Kansas there are approximately 1,600 cases of this disease within hospital walls and many unrecognized cases outside.

Here let me quote from an open letter from Bayard Holmes, a Chicago surgeon, who, having lost his son to this disease, dedicates the rest of his life to the study of it, and in a ringing appeal for the promotion of research writes:

"In order to audit this plague of civilization, add to the inconceivable personal suffering of these soul poisoned youths, the miseries of an equal number of confounded and woebegone families from which they have been snatched by this horrid and revolting possession, . . . follow to their homes the stricken, astounded and worse than heart-broken families, and then alone can this social blight and catastrophe be dimly recognized.

". . . We have been stunned by grief and woe. We have been silenced by the stigma of disgrace which an unknown etiology of these diseases has permitted the keepers of the insane to heap upon us."

In spite of this tremendous prevalence and in spite of this terrible seriousness of the disease, its very name is unfamiliar to many physicians and its vaguest outlines to an even greater number. In this brief paper I shall endeavor to present in a simple way the outstanding facts about the disease. There are, *first,* certain clinical features; *second,* prognostic principles; *third,* social and medical implications.

Nature

For working purposes we must conceive of the mind as being made up of perception, ideation, emotion and volition—we perceive, we think, we feel, we act. Each of these functions of the mind may be distorted, may be split in any one of several ways. We are familiar with the hyperactive emotion of the melancholiac, with the underactive and underdeveloped intelligence of the feebleminded, with the feebly developed will of the neurasthenic. These abnormalities may be classified as being those of the type of exaggeration, those of diminution, those of distortion, and those of actual fracture.

Dementia praecox represents the fractured or broken mind. From this fact comes the name by which it is best known technically—schizophrenia; from "schizo," meaning split, and "phrenia," meaning mind. The split, distorted, broken mind is the mind of dementia praecox.

First of all the *perceptive* powers are distorted. This results in hallucinations—that is they perceive things which do not exist. I will cite briefly a few typical cases to illustrate this.

Case 1. Arthur (10987) is 23 years old. All of his family were normal but for three years he had been peculiar. He talked of hearing people whispering about him and making significant sounds which referred to him; he thought people said that he was a nigger, he heard bells ringing, he thought that his horse lost weight because it had been doped, he thought he saw spies watching him.

Case 2. Grace is the daughter of an intelligent and prominent man in this state. There were various evidences of dementia praecox but for the moment the most interesting fact is that she seemed quite normal except that she would constantly request that Arabella, the angle who came each night to her room and sat in the corner and made a noise which disturbed her, be taken away.

Hallucinations occur in nearly every case of dementia praecox. There are many other mental diseases in which hallucinations are prominent and so a diagnosis cannot be made from this alone. They are as a rule, however, a bad sign.

After perception we think of intellect. The distortion of intellect is shown as delusions and the splitting of intellect as incoherence. There are other forms of pathology too technical to dilate upon here. But these may be well represented in the case of Edmund.

Case 3. (11045). Edmund was 18. He was considered well until one week he refused to get up in the morning to go to work but lay in the bed reading the Bible. He announced that he was the Holy Ghost and therefore didn't have to work. He said he would be fed anywhere he went. He said his brother was persecuting him, had beaten him. He said a peculiar man sat by him and ate oranges to tease him. He said he was a common human being on whom God had forced the Holy Ghost power. This power was forced on him so as to reveal the truth to the people. "North is now south and east is now west, the world having been changed in February." He said a voice told him to go straight ahead. "The house dog seemed frightened. The house cat was between him and the dog. The former was spitting and showing fight." He knows it was God's voice said these words to him and has the following to say which he thinks is quite plain. The dog represented the other man, the cat the other woman, and himself the third man in the modern triangle. The dog being frightened meant he, the patient, was going to be the winner. The girl, or the woman, in this case is from a family with thirteen children. The number "13" is explained as follows: There are thirteen tribes of Judea in the Bible, thirteen colonies in the United States, thirteen is an unlucky number. There are also seven churches mentioned in Revelation, and there are seven children in his parent's family. Here he just gives up trying to explain anything further regarding the numbers but says there is some connection regarding these numbers etc., which a preacher by name of Scheding could explain.

Broken or split feeling results in the patient's believing one way and feeling another way. Thus patients often say they are about to be burned at the stake but they smile or ask for a cigarette in the next breath. I once had a patient who would fall on his knees and say in a most piteous voice "For God's sake, don't let them cut me up this afternoon; isn't it almost time for supper?" Emotional splitting is usually shown by a general apathy. The following case illustrates it very well.

Case 4. John (11037) is the son of a prominent Kansas physician. He is 30 years old. For a long time he has been queer, bashful, retiring, sensitive, very serious, not interested in other people, male or female. (This is characteristic of dementia praecox.)

He began to have some delusions, such as have been previously discussed, that he was associated with the high prelates of the Catholic church. He began to make notes from books which were so disconnected that no one could understand them. He wrote long letters which were meaningless and silly. As time progressed he bcame more and more stupid and silly in his talk. For example he said "I am a federal person. This makes me swear and abuse. I am a federal person and I would not commit the sin of fornication." These things he would say to himself in a low voice sitting in a chair, his eyes cast down, his head hung, his hands rolling over his knees. He would often laugh quietly to himself or move his lips, wrinkle his forehead, adjust his coat, stare without winking for a long time, tap his mouth in a peculiar way, etc. He seemed to be absolutely indifferent to every thing that was said to him although he would answer and sometimes do so quite intelligently. It is important to remember that all these symptoms may occur without any loss of memory. This boy's memory was excellent, and he could repeat considerable poetry and was by no means ignorant of current events, classical literature and other matters.

The type of dementia praecox characterized by emotional lack is known as *hebephrenia.*

Last of all we come to the destruction of *volition* which shows itself in misconduct of the peculiar erratic, impulsive, contrary, and resistive forms so familiar to the psychiatrist and so unfamiliar to everyone else. It is the conduct of the mentally sick person which determines whether or not they should be committed to a state institution and the conduct of dementia praecox is usually such that commitment is necessary. This may be of almost any sort of thing. It may be homicide, suicide and other criminal offense or it may be the standing or lying in one physical position for days and weeks and months and years. One patient whom we thought was nearly well and who showed very few signs of the disease last week suddenly seized a hammer and applied it to the face of an unoffending friend without provocation.

To show the extremes to which these cases go I will cite the case of Minnie (Case 5) (10577). Her disease began with delusions that she had caused the influenza and that her children were burning up. She seized a knife and said that Jesus told her to cut her baby's throat. She sat down on a hot stove and said that she had to burn up, and almost did.

For a time she was very disturbed and noisy then for a time motionless for long periods. At the present time she presents a most horrible spectacle. She crouches like a buzzard, her head bent over her knees, saliva drooling down her face, her gown soiled, her face mask like. She has to be fed by tube because everything that we attempt to do for her she resists, fighting with tooth and nail at times. It is these cases in the most severe stages which form the typical picture of insanity in the mind of the public. In such extreme forms they are rare but less severe types are very common.

It is an important fact to emphasize that the so-called violent patients are not numerous. At the Topeka State Hospital, which by the way is an insti-

tution of which Kansas should be proud because it ranks high among the institutions of the West—thanks in large part to the excellent direction of the Superintendent, Dr. M. L. Perry—there are at the present time about 1,500 patients and of these certainly less than 50 could be regarded as violent in the lay sense.

Cases characterized by volitional disorder are known as *catatonic* type of dementia praecox.

Prognosis. If you will look in your text books you will find the prognosis given as practically hopeless. This, indeed, is the general viewpoint. With it I certainly do not agree. I have seen a good many patients upon whom a diagnosis of dementia praecox was absolutely positive who became as far as we could see practically or perfectly well. There have been a considerable number of such at the Topeka State Hospital where I have seen them with Dr. Perry and I have also seen them in my private practice as well as in other hospitals.

The truth of the matter is that there are probably three types of prognosis, but not corresponding to three types of dementia praecox illustrated above. There is a type of dementia praecox which progresses steadily and inevitably to severe dementia and which must be considered utterly hopeless in our present knowledge. This I call type one and it corresponds to the conventional picture first described by Kraepelin. There is a second type in which there are attacks of mental disease which certainly seems to be dementia praecox, but from which the patients recovers completely or almost completely only to have a subsequent or several subsequent attacks. I do not know what the ultimate outcome of these cases is. There is a third group mentioned above made up of patients who have typical dementia praecox who get well and stay well.

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Implications

1. First of all I would emphasize the fact that these cases of incipient dementia praecox are constantly occurring unrecognized all about us. Unlike the feebleminded multitudes which clog our schools and industries these people do all right up to a certain point and then go to the bad, often with much resulting damage.

2. The practical thing to do in these cases is that the diagnosis once made, the patient should be committed. There are very few exceptions to this rule. I have the less hesitation to make this statement because of the remarkable good provision in this state for the insane, like so many things at home I think so many of us do not appreciate, but from contact with numerous eastern and western institutions I can assure you that Kansas should be proud of what she has.

3. The third practical point I want to make is that we should have more facilities and opportunities for and interest in the subjects of research in mental diseases particularly in the matter of dementia praecox. We know little about the nature of the disease but the little that we do know is in every way encouraging toward the ultimate solution of the problem. Hence it is fairly safe to predict that some day we will be able to prevent many and cure many cases of what now must remain hopeless mental disease. (1921)

Professional Cards

Considerable consideration has been given to the pros and cons of continuing the section of professional cards in the JOURNAL. The main argument in their favor has been that a certain amount of income is received from their source. The rebuttal is that it is not democratic, since all cannot use the space, and that it is an additional tax on members who are already supporting the paper through their dues. It has finally been decided to discontinue this advertising section with the January issue, at which time refunds will be made on unexpired contracts. In the meantime contracts expiring will not be renewed. It is hoped that this change will meet with the approval of the Society. (1934)

The Nurse Problem

In the early nineties there were very few graduate nurses in this state. Those that were here found only occasional demand for their services for which they charged fifteen dollars per week.

Now there are a great many graduate nurses in the state, they are seldom idle if they care to work and their regular charge is $42.00 per week.

In several states the medical profession is seriously agitated over what is called the growing aristocracy of the trained nurse. Conferences are held, committees are appointed and the demand continually made that something be done about it.

In those early days, there were few trained nurses, there were very few training schools, and, in fact, there were comparatively few hospitals in this part of the country, at least.

There were plenty of good old souls among the women who liked to nurse sick people, some of them for pay and some of them for the pleasure of it. They could do many things for the patients but were not much help to the doctors. Their instincts and their experience were their dependence and they could not be taught to do things for which they could not understand the reasons.

A little experience with graduates from a training school soon convinced the doctors that in these trained women he not only had a nurse but an assistant. One who not only knew how to do all that the untrained nurses could do for the patient, and could prepare proper kinds of diet, but could take the pulse, temperature and respiration, could catherize the patient or give a hypodermic injection if required and do a great many other things that could not be trusted to the practical nurse or the neighborly nurse. It was very natural that, since she relieved him of some of his responsibility and a great deal of the detail, the doctor should more and more frequently demand that a trained nurse be put on his cases.

The good old soul who was so kind, and patient and sympathetic, soon had no place to go and finally dropped out of the picture. The doctors were then not sorry to see her exit, for good as she was, she was nevertheless trying to their temper. She did not hesitate to advise him about the case, tell him what a great remedy a cranberry poultice was in erysipelas, or how old Dr. Brown, long since passed away, had treated cases just like this one.

The doctors found in the trained nurse a very helpful assistant and they wanted to make them more helpful. They wanted to use them as surgical assistants and as office assistants, technicians, etc. And, since the doctors practically controlled the training schools it was natural that the curriculum should be expanded and advanced.

The doctors appreciated the assistance given them by these trained nurses. They praised them highly to themselves and to the people employing them. After a favorable issue in a doubtful case they would sometimes tell the patient and his friends that all the credit was due to the splendid care given by the trained nurse. It was not uncommon for doctors to say that all a typhoid fever case needed was a good trained nurse on the job. They finally came to believe it and there are few of them that hesitate to criticize the doctor who fails to follow their conception of the proper methods for the treatment of such cases.

If the nurses of today are overtrained the medical profession is to blame. A casual review of the very many textbooks that have been prepared for use in training schools will show that most of them have been prepared by doctors who belong to the teaching staff of some training school, that these textbooks indicate what the author thinks the nurse should know about that particular subject, and that most of them have the idea that nurses in training should have practically the same course of study as the medical student. In some of the training schools the whole field of medicine is covered, the pupils are given complete courses of lectures in anatomy, physiology, chemistry, pharmacology, bacteriology, pathology, symptomatology, obstetrics, gynecology, surgery, practice of medicine and all the specialties. All this instruction is wasted on many of them—many of them that become very excellent nurses but not quite as good assistants to the doctors.

It is doubtful if many of us would feel satisfied now with the old time nurses, in fact, one may be quite sure that it is not the overtraining that is the most objectionable feature of the present situation but rather the estimate the trained nurse has put upon the value of her services.

A good deal of stress is put on the expenditure of time and money in securing a medical degree and one frequently hears it said that the average earnings of a practitioner do not justify so large an investment. The medical student puts in four years of nine months each in his college work. The nurse puts in three years of twelve months each in her hospital training. The medical student pays a tuition and pays for his board. The student nurse pays no tuition but works for her board and when she has finished will not usually be able to work continuously if the opportunity offers. If one compares the scale of wages adopted by the nurses associations with the scale demanded by skilled

labor unions it must be admitted that the nurse is not overpaid.

The trouble, however, lies in the fact that while the trained nurses are not overpaid the majority of the people who require the services of a nurse are unable to pay the wages now demanded.

The problem is to supply the people with efficient services at a wage they can pay and the solution of the problem lies with the hospitals and training schools. No one cares to consider a return to the old time nurse, but a distinction might be made between a trained nurse and a medical assistant.

If an intelligent, fairly well educated girl cannot be taught enough in one year in a good hospital to properly care for a sick patient another two years won't add much to her ability in that direction. She probably won't know very much about medicine, but she will be able to do all that it is necessary for her to do as a nurse. There is no reason why the training schools should not arrange to give the didactic course in principles and practices of nursing during the first year and teach the first year classes by demonstration and experience how to nurse the sick; and at the end of the year give these students a certificate of proficiency.

There will be a sufficient number of pupils desiring to take a complete course to supply all the demand for the completely trained graduate nurses. A nurse that has had a year of thorough hospital training would fill all the requirements of ordinary cases. Where the exigencies of the case demand the services of one acquainted with the symptomatology and course of a disease, one competent to meet such emergencies as are likely to arise, the graduate nurse must be employed; and there will always be sufficient demand for them to justify the continuation of the complete training school course.

From reports it seems that the Illinois State Association of nurses has put into effect a policy under which its members are refusing to accept twenty-four hour duty as private nurses in public hospitals and the scale of wages there is fifty dollars a week. If a hospital case requires a special nurse at all, it requires twenty-four hours service. That means that in Illinois a hospital patient requiring a special nurse, must employ two, at fifty dollars a week each, and if as in this state, the patient must also pay for their board, that is at least ten dollars a week more—a total of $120.00 for nursing.

There are only two conditions that justify the employment of graduate nurses for special duty in hospitals that conduct a training school. One is a scarcity of student nurses, but an apparent scarcity of students is sometimes due to the fact that most of their time is consumed in the class room. This condition can be corrected by using for practical instruction half, possibly two-thirds, of the time consumed in trying to teach them a lot of things they cannot learn and would be of no practical use to them if they did learn. The other condition is the expressed desire on the part of the patient for a graduate nurse. Pupil nurses can be put on special duty and will give efficient service if their work is supervised by a competent head nurse. Putting the pupils on duty as specials gives them training and experience in the kind of service they are expecting to give after they have graduated; and they should have it.

This kind of special nurse could be furnished by the hospitals at twenty-five dollars a week. This would be a welcome addition to the income of most every hospital. A plan of this kind would encourage the people to go to the hospital when they are sick. A great many of them could better afford to go to the hospital and have a student nurse than to stay at home and hire a graduate nurse at the present scale of wages.

One may freely discuss this very serious problem in the care of the sick without in any degree minimizing the importance of, and necessity for, the highly trained nurse, but one does not need a landscape artist to paint a fence. (1927)

Editorial

The Prohibition Question

We in Kansas are not very much interested in the modification of the regulations which have controlled the prescribing of alcoholic liquors by physicians. It is not likely that the physicians in this state will ever have any more liberty in that direction than they have now.

No doubt there are a good many of those practicing medicine here that would favor a modification of the bone dry law that would permit them to use and prescribe alcoholics but there are not very many who would actively support a bill for that purpose. It is very doubtful if a member of the legislature could be found who would be willing to introduce such a bill and very few members willing to vote for it. That doesn't mean that they are all prohibitionists, but that they believe most of the people in Kansas are.

While we are not directly concerned in the probability that the restrictions on the amount of liquor that can be prescribed by physicians will be removed or at least modified, we may be interested in the various attitudes of those who will be affected by the change. There is one group who express alarm at the danger of converting doctors into bootleggers. However, most of us have found that doctors are much like other people. Those who bootleg the liquor they are now permitted to prescribe will just bootleg a little more, but it is hardly likely that any who have heretofore confined their prescriptions to legitimate purposes will be in any way changed by the removal of restrictions.

Another group believes that if alcoholic liquor has any therapeutic value in the treatment of human ailments those who are permitted to prescribe it should be competent to determine for themselves the amount required in each individual case. At least this is in harmony with the general principles of scientific liberty the medical profession has claimed.

If alcoholic liquors have any therapeutic value in the treatment of human afflictions, any restrictions placed upon its use affect the sick people who require it and it is a questionable policy that would make sick people suffer in order to protect a few weak doctors from the temptation to become bootleggers. (1931)

Editorial

The Outlook for Medicine

The general depression has added somewhat to the unrest, the prevailing dissatisfaction with things as they are, in the medical profession. Prophecies as to the future and suggested plans for the present are subjects for numerous dissertations. Some support is readily obtained for most any scheme which offers a possible solution of some of the most pressing problems. While this one and that one and a few others are trying to devise some new and unique plan of procedure by which the inevitable may be prevented or postponed, the steady encroachment of state medicine or its congeners is helplessly and hopelessly accepted as a fact.

Wise men in and out of the profession discuss the high cost of sickness and by various arguments attempt to shift the responsibility from one shoulder to another, because it is upon this theme that arguments for state medicine are builded. It is easy to explain and the evidence justifies the explanation, that the services of physicians and surgeons occasion less than thirty per cent of the total cost of sickness. However, the medical profession cannot thus entirely shift its responsibility for the expense of laboratory tests, roentgenologic examinations and hospitalization. In fact, until the beginning of this agitation about the high cost of medical care, the medical profession had reason to be, and did feel proud of the fact that it was rendering the best possible service to sick people, that it was using every available means for accurate diagnosis and was assuring them of better care at the hospital than was possible in the home. If during the years of prosperity the people came to appreciate these things, in fact came to demand them with a little more of this or that expensive type of service added, it was because they believed, as they still do, that their sick and injured should have the best care possible, not because the attending physicians always prescribed it.

The people can get just as cheap medical care for their sick as they ever could. They can keep them at home, have them nursed by relatives and friends and in the majority of cases can depend on the bedside diagnosis of their physician. They can also heat one room in the house with a wood or coal stove and leave

the other rooms cold; they can heat water in the teakettle for an occasional bath in the washtub; they can go back to the horse and buggy or walk; they can save a lot of money by fattening a few hogs in the back yard and butchering them for the winter meat. Why pick on the care of the sick ones for retrenchment?

A program of retrenchment involving the modern comforts of life would not appeal to many people, nor was this agitation about the cost of medical care initiated by the people who were getting the service. They were getting what they wanted and what they paid for, when and if it was convenient, and they still do.

We are all paying too much for the comforts of modern life, frequently called luxuries. We pay too much rent, too much to keep the automobile in running order, too much in taxes for which we apparently receive little or nothing in return; too much for building highways that are never completed; too much for everything when the income fails to meet the demands on it. But there are no large committees appointed and no great funds subscribed or donated to find out what becomes of the money collected for highway construction. No committees have been appointed or large sums of money appropriated to make a survey to determine the average cost per family for automobiles and their maintenance, and yet this item is far in excess of the cost of medical care.

All of these things are already commercialized and occupy their proper place in the world of magnificent finance.

The care of the sick is practically the only important necessity that is not controlled by some sort of organized monopoly. Its commercial possibilities are enormous and the only thing standing in the way of their realization is a lack of information which will soon be available. One's imagination must be severely taxed to see any altruistic or philanthropic motives in this much discussed and much advertised and very expensive survey of the cost of medical care.

The key stone in any insurance structure for the care of sick people is of course cheap and efficient medical service. There is nothing in the history of the medical profession to indicate that financial reward has ever been an important consideration in the service they have rendered to those requiring it.

The history of so-called industrial medicine shows plainly that medical service can be purchased at wholesale at prices that permit it to be retailed to the people at a mere fraction of the prices they would have to pay independent physicians.

The history of sickness insurance in Europe proves that whatever concessions are made in the cost for the care of the sick and injured, it is always the medical profession that makes them.

Of the many explanations as to why the medical profession should bear this burden there are but two that deserve consideration: The medical profession is willing to accept the burden, and it is not in position to prevent its imposition anyway.

Organized medicine really does not exist. Our local and state medical societies, which were founded and are maintained as scientific and educational bodies, have been federated into a great national association, which was also founded and is maintained as an educational and scientific body. It is a great association and has accomplished the almost impossible in the advancement of scientific medicine. But efforts to initiate any activity for the economic welfare of the profession have failed and no doubt will continue to fail. It is doubtful if an organization founded for educational and scientific purposes should, even if it could, attempt to adapt itself to the purposes of a trades union.

It has been but a few years since skilled laborers of all kinds were at the mercy of the corporations that employed them. Long hours and wages that were barely sufficient to sustain them was the rule. The trades unions have not only succeeded in enforcing their demands for shorter hours and better wages, but they have been able to maintain both the working hours and the wage scale in spite of the general depression and unemployment.

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(1931)

The Crippled Children's Law of Kansas

The last legislature enacted a law for the care of the indigent crippled children of the state which should appeal to every physician in the state. It affords the medical profession an unusual opportunity, and the responsibility for its success will depend largely on the kind of support given it by the rank and file of the physicians of the state. The average doctor may be uninterested in it or may regard it solely as a means of furthering his own practice and thus rapidly bring the law into disrepute, or he may, and undoubtedly will, submerge all self interest and pave the way for providing every physically handicapped indigent child every chance to become an independent, self-respecting member of society.

The provisions of the law are unusually thorough and seem to provide for every contingency that may arise in this problem. It has a remarkably broad interpretation of the meaning of the crippled child, embracing all persons under twenty-one who have a physical defect or disease that can be improved or removed by appropriate medical or surgical treatment. It provides the finances to defray the expense of such treatment, each county being assessed one-tenth mill for every taxable dollar to comprise a separate fund to be used only for the care of crippled children of that county. It includes compensation to the doctor as well as to the hospital. It provides for a commissioner to carry out the provisions of the law and to see that the afflicted child gets into the hands of none but competent specialists and in only those institutions that have fully adequate facilities to give the best service. It also provides safeguards so that only deserving indigent children may reap the benefits of this law. Furthermore, it opens the way for the care of such patients in various sections of the state as soon as adequate facilities and competent personnel become available.

While the law has supplied the governmental machinery for the care of the crippled child, every physician knows that much has to be done before its full benefits can be secured. It is estimated that over 5,000 children will become eligible for this treatment. Yet there is no well organized children's hospital in the entire state that can provide the variety of services such as can be secured in some of our neighboring states. There is at the hospital of the state medical school a children's ward with a maximum capacity of fifty patients and a similar ward in only one other hospital in the state. There should be a well equipped, specially designed children's hospital with at least three times as many beds, including a brace shop, a complete physiotherapy unit, a department of occupational therapy and a special school for the education of patients who may be kept months from school. Only with such supplementary departments and equipment can the hospital be thoroughly efficient, but this is necessarily expensive and can be erected and managed most economically where an organization of well qualified specialists already exists, such as in the medical schools of the state universities. The states of Oklahoma, Minnesota, Wisconsin, Iowa and Indiana have provided such children's units at their respective medical schools and the medical profession should urge that Kansas do the same with its medical school. Failure of the law may result from inadequate facilities rather than from the law itself or the attitude of the doctors, and all physicians should be informed of this situation and use their influence to change this lack of preparedness.

The medical profession should not only be awake to the opportunities of this law but should be cognizant of the danger to this law if a few improperly qualified physicians should succeed in using the law to further their own private interests or if the cultists should succeed in their endeavors to be permitted to carry on their unrecognized practices on children under the protection of this law. In other words, two obligations rest upon every physician interested in his community and in the crippled children of the state, first, to give unstinting support to the crippled children's commission in limiting the care of their wards to only those organizations that are adequately equipped and have competent specialists on their staffs and, second, to use every influence to secure more adequate and larger facilities for such care, either at the state medical school or at some other larger center or at several places. (1931)

H. R. WAHL.

Federal Medical Relief

In accordance with the Federal Emergency Relief Act of May 12, 1933, the Federal Emergency Relief Administration issued, on June 23, rules and regulations which will provide adequate medical service for persons now indigent and receiving federal relief. Medical relief is available to all persons who are on the federal relief rolls but it is the understanding persons may apply and receive medical relief only, although such persons must prove their need for this type of service. The scope of medical care has also been defined to include: bedside nursing care in connection with medical care, and emergency dental service for such families as are receiving federal relief.

The Federal Relief Administration has made every attempt to preserve the traditional family and family-physician relationship in the authorization of medical care of indigent persons in their homes; consequently, the choice of physician may be designated by such person or persons who are to receive the medical care. The same provision has been made for dental and nursing service. Funds, however, cannot be used for the payment of hospital bills or to provide general institutional care. Such services to the indigent should be made available through local funds.

Authority for medical care is to be issued in writing by the local relief officer on the regular relief order blank. In an emergency, telephone authorization may be made but is to be immediately followed by a written order. Authorization for bed-side nursing care will be made on recommendation by the attending physician.

Provision is also made for the purchase of medicine and medical supplies to be used in the home. Authorization for medicine or medical supplies will be issued in writing and only upon the written request of the physician. Request is made, however, that physicians use a formulary which excludes expensive drugs where possible, but if expensive medication is considered essential by the attending physician it may be authorized after consultation with the local medical advisory committee. Further provision is made that "prescriptions for necessary drugs and medicine shall be restricted to the National Formulary or the United States Pharmacopeia. To avoid excessive expenditures on remedies of unknown or doubtful value, proprietary or patent medicines shall not be authorized."

The Administration in the promulgation of its rules and regulations provides the agreement for medical relief shall be between the state and/or local relief administration and the organized professional group of physicians, nurses and dentists. Requirement is made that a fee schedule be outlined and a flat rate established on a per visit basis for the usual care given acute and chronic illness, for attendance at confinement, and "all special services (medical, nursing or dental) be covered by an agreed reduction from the usual minimum fee schedule for such services with an agreed maximum fee. . . . All fees shall be established on the basis of an appreciable reduction from the prevailing minimum charges for similar services in the state and local communities, with due recognition of the certainty, simplicity and promptness of payment, that authorization from the local relief administration insures."

At the Annual Conference of Secretaries of Constituent State Medical Associations held in Chicago, September 22 and 23, it was learned that a number of states, including New Hampshire, New Jersey, Kentucky and Montana had had this type of service for a varying period of several months, and apparently the arrangement was entirely satisfactory. One state reported that a fee schedule had been adopted whereby the work was done for 15 per cent less than the normal fee. Another stated that although the agreement had been made by the state medical society with the Relief Administration, the medical society had the privilege of withdrawing at any time and also had the right to decide when the emergency ended.

Under the provisions of the rules and regulations, advisory committees of the medical, nursing, dental and pharmaceutical associations are to be organized to confer with state relief officials in the formulation and adoption of adequate programs for medical and dental service and nursing care in the homes. Consequently, a committee will be appointed by the President of the Kansas Medical Society to confer with local relief officials and as soon as a program is formulated immediate notification will be made to the local county medical societies. (1933)

Editorial

The Brinkley Matter

A proper understanding of the present status of the Brinkley matter will be best arrived at from the calendar of events in connection with it.

The complaint against Brinkley was filed April 29, 1930. The attorneys for Brinkley applied to the Shawnee District Court for an injunction against the Board May 7, 1930. Judge Whitcomb of the Shawnee County District Court denied the injunction May 20, 1930. Appeal was taken to the State Supreme Court June 6, 1930 and its decision sustaining the authority of the board to conduct the hearing was rendered June 13, 1930. An appeal was taken to the United States Supreme Court on June 17, 1930, and this court refused to take up the case.

The hearing by the board was begun on July 15 and continued until July 30, when a recess was taken until September 15, 1930.

On September 15 the members of the board visited the Brinkley Hospital at Milford and witnessed his operations.

The hearing was resumed on September 16 and on September 17 the Board voted to revoke the license of Dr. Brinkley.

Shortly after the order was issued revoking Brinkley's license the Attorney General applied for an injunction to restrain Dr. Brinkley and his staff from practicing. The attorneys for Brinkley filed an application for an injunction in the federal court on October 24, 1930. Briefs in this case were filed on December 10 and on January 28, 1931, Judge Pollock decided that he had jurisdiction in the case and the injunction case would be heard by him.

To anyone who may still be in doubt as to the status of this case one might suggest a perusal of Dickens' Bleak House. (1931)

Editorial

Finis—Brinkley

It is a source of satisfaction of the physicians of Kansas that the Board of Medical Registration and Examination was upheld on all points in its revocation of J. R. Brinkley's license by a recent decision of the federal district court. The Kansas board and Dr. Barney are entitled to the lasting gratitude of the citizens of our state for their courageous action five years ago which resulted in the removal of the Milford menace to one or another of the banks of the Rio Grande. Judge Johnson said:

"Brinkley made the practice of medicine a business, adopting the usual present day methods of propaganda by use of the mail and radio for its development and extension.

"These methods are not only notoriously in conflict with the ethics of the profession, but in my opinion, in conflict with the best interests of the public, and irrespective of the value of the operations performed by him at the hospital for the amelioration of the prostate gland, or the benefits to individuals using prescriptions given them through radio broadcasts, the possibilities of injury to the general public resulting from such methods are so apparent that its mere statement is sufficient."

This decision will strengthen the authority of the Board to protect the public from quacks and charlatans in the future besides giving judicial sanction to such of our medical ethics as are opposed to advertising and promiscuous prescribing. (1935)

How to Get a Basic Science Law

The Kansas Medical Society continues its unrelenting efforts toward the passage of a basic science law. A pamphlet has just been published by the Society entitled "WHY DOES KANSAS NEED A BASIC SCIENCE LAW?" A copy has been sent to each member and a supply of the pamphlets to be widely distributed among the population is in the hands of every county society secretary.

This pamphlet sets forth briefly and concisely what the basic sciences are, what constitutes basic science laws, together with the discussion of the valid and invalid objections to such laws, and why Kansas needs a basic science law. The Committee on Public Policy is to be congratulated upon its work in the preparation of the pamphlet. A great deal of study and careful consideration of the subject has been condensed into a form to be quickly read and there is displayed a fine sense of fairness in its presentation.

Every Kansas doctor should read "WHY DOES KANSAS NEED A BASIC SCIENCE LAW?" This pamphlet is not to be cast into the wastebasket nor allowed to be submerged among accumulated papers on the physician's desk. It is to be read, then given to patients and influential friends to read. It is of the utmost importance that the information contained in the pamphlet be disseminated as widely as possible, among not only physicians, but the general public as well. Kansas physicians must become thoroughly informed as to this activity of their Society in order to use their influence to the fullest extent for the passage of the Basic Science law. The interest of the public must be aroused and widespread understanding of and sympathy for the measure created.

Kansas was the first state in the Union to propose such legislation when, in 1911, Governor W. R. Stubbs appointed Dr. J. A. Milligan and F. Dumont Smith as a commission to work out a method of state control for the practitioners of the various cults. At that time, Kansas had a license act for only the regular medical profession. The bill prepared by Doctor Milligan and F. Dumont Smith was a model for a Basic Science Law, but the legislature, failing to comprehend the importance of such a measure, did not pass it. Since that time, The Kansas Medical Society has never ceased in the effort to secure the passage by the legislature of a Basic Science Law. Nine other states have gone forward to the enactment of such legislation and the experience of those states in the results obtained is most gratifying to the proponents of basic science legislation.

Kansas will have a Basic Science Law as soon as the public is educated to the need of it. The obstruction of interested pressure groups to the progress of science, the misconception of "liberty," and the failure of men of public affairs to recognize the importance of legislation pertaining to the health of the population are responsible for the delay in giving to the citizens of Kansas the protection of a Basic Science Law. The medical profession has long ago acknowledged its responsibility. It remains for each physician to assume a personal responsibility in the campaign to publicize the measure and to use his influence to secure its passage by the legislature. (1937)

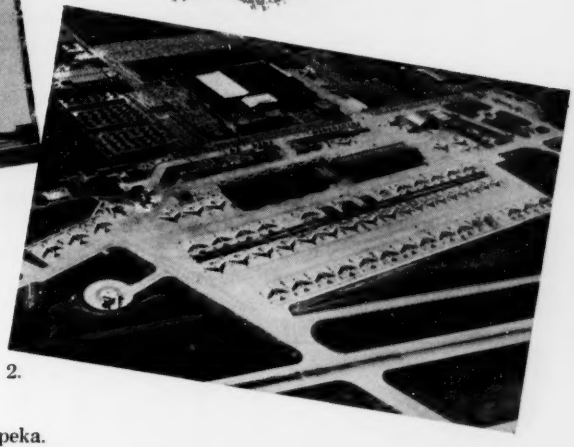
Munns Appointed Secretary

The Executive Secretary Committee appointed at the Wichita meeting has met on several occasions to consider the many applications that were received. Several applicants were requested to meet with the committee in Wichita, on June 24. After interviews with the applicants, the committee named Mr. Clarence Munns as the full-time executive secretary.

Mr. Munns is an attorney; graduate of the University of Kansas, class of 1930. He is a native Kansan, his home originally being in Hoisington. For the past four years he has been associated with the Phillips Petroleum Company in legal and credit activities with headquarters in Bartlesville, Oklahoma, and St. Louis, Missouri. (1934)

1941
"The Doctor Seeks New Tools"
1959

1.



2.

1. Kansas Blue Cross-Blue Shield building, Topeka.
2. Boeing Airplane Company, Wichita.

Introduction

Kansas, along with the rest of the country, is emerging from the depression of the 30's with its bank holidays and increased welfare rolls. Railroads and street railway systems are feeling the effects of growing bus traffic and private automobile travel. Adolf Hitler and his Nazi cohorts have all of Europe and a good share of the world trembling, and some Japanese leaders are thinking about acquiring American possessions in the Pacific. "F. D. R." has given his Fireside Chats for eight years, and has shattered precedent again by accepting a third nomination and election as President of the United States.

Diabetes is no longer the same threat since the discovery of insulin. Pernicious anemia has succumbed to liver therapy after being a "fatal" disease for so long. Measures to detect tuberculosis in an early stage have decreased its toll. The beginnings of chemotherapy have appeared with the sulfonamides, initiating a change which will revolutionize treatment of infections and pave the way for antibiotics to follow.

Bombs will soon fall on Pearl Harbor, then follows the tragedy of World War II, the greatest war in the world's history. We are on the brink of a period of phenomenal growth of various voluntary plans for pre-payment of hospital and physician expenses. There will also be repeated attempts to foist compulsory health insurance on the American people. New antibiotics, new chemical research, and radiophysics will furnish the physician with the new tools he constantly seeks.

Group Hospitalization

The following is the group hospitalization enabling act sponsored by the Kansas Hospital Association and passed by the Legislature in its recent session:

Section 1. This act shall be known as the mutual nonprofit hospital service corporation act.

Sec. 2. Mutual nonprofit corporations may be organized for the purpose of entering into contracts with participating hospitals to provide hospital service for their subscribers. The affairs of any such nonprofit hospital service corporations organized under this act shall be managed by a board of directors of not less than fifteen members composed of:

(1) Administrators or trustees of participating hospitals;

(2) Licensed physicians exclusive of group (1), and

(3) Members of the public exclusive of groups (1) and (2), in equal proportion. The directors shall take oath of office as in other corporations and duplicates of such subscribed oaths shall be forwarded at the time of election to the commissioner of insurance for filing in his office. The by-laws shall specify the number of directors necessary to constitute a quorum, which shall not be less than ten members.

Sec. 3. Corporations organized under the provisions of this act are empowered and authorized to enter into contracts to provide hospital service for its subscribers with such hospitals, including municipal, county, proprietary and charitable hospitals, as may be approved by the State Board of Health or its successors in office. The governing bodies of municipal or county hospitals are hereby authorized and empowered to contract with mutual nonprofit corporations organized under this act to provide hospital service for the subscribers of said corporation. Such contracts shall constitute direct obligations of the participating hospitals to the subscribers: *Provided,* That nothing in any contract to be made by any such corporations with a participating hospital or subscriber shall have the effect of imposing upon any participating hospital any obligation or liability for any act, omission or default of any other participating hospital or of such corporation.

Sec. 4. The commissioner of insurance shall issue a certificate of authority to such corporation upon compliance with the following conditions: (A) It shall file with the commissioner of insurance a certified copy of its charter, by-laws, and the policy forms and rates it proposes to use. (B) It shall file with the commissioner of insurance contracts with at least twenty participating hospitals having a total of not less than three hundred beds to provide hospital service to the subscribers as required by section 3 of this act. (C) It shall hold bona fide applications for hospital service upon which it shall have collected a minimum of two months' premiums from at least two hundred subscribers, upon which it shall issue policies simultaneously. The total of such premiums shall be held in cash and shall not be disbursed until the policies are in force. Any such corporation shall be in possession of lawful assets over and above all liability in an amount not less than three thousand dollars and shall file with the commissioner of insurance a financial statement certified to by at least two executive officers. Before issuing a certificate of authority the commissioner shall cause an examination to be made of the affairs of the corporation as provided by section 40-208 of the General Statutes of 1935.

Sec. 5. Every policy made by a corporation subject to the provisions of this act shall be for a period not to exceed twelve months, and no policy shall be made providing for the inception of benefits at a date later than one year from the date of the policy.

B. No policy except as provided in subsection E of this section, between any such corporation and a subscriber, shall entitle more than one person to benefits, except that a "family policy" may be issued, at an established rate, granting hospital benefits to a husband and wife, or husband, wife and their child or children not over eighteen years of age, who must be named in the policy.

C. Every policy entered into by any such corporation with any subscriber thereto shall be in writing and a certificate stating the terms and conditions thereof shall be furnished to the subscriber to be kept by him. No such certificate form shall be made, issued or delivered in this state unless it contains the following provisions: (a) A reference to the amount payable to the corporation by the subscriber and the times at which and manner in which such amount is to be paid; (b) a statement of the nature of the benefits to be furnished and the period during which they will be furnished; and if there are any benefits to be excepted, a detailed statement of such exceptions printed as hereinafter specified; (c) a statement of the terms and conditions, if any, upon which the policy may be canceled or otherwise terminated at the option of either party; (d) a statement that the policy includes the endorsements thereon and attached papers, if any, and contains the entire contract; (e) a statement that no statement by the subscriber in his application for a policy shall avoid the policy or be used in any legal proceeding thereunder, unless such application or an exact copy thereof is included in or attached to such policy, and that no agent or representative of such corporation, other than an officer or officers designated therein, is authorized to change

the policy or waive any of its provisions; (f) a statement that if the subscriber defaults in making any payment under the policy, the subsequent acceptance of a payment by the corporation or by one of its duly authorized agents shall reinstate the policy, but with respect to sickness and injury, only to cover such sickness as may be first manifested more than ten days after the date of such acceptance; (g) a statement of the period of grace which will be allowed the subscriber for making any payment due under the policy. Such period shall be not less than ten days; (h) a statement that the subscriber may choose any hospital for hospitalization.

D. In every such policy made, issued or delivered in this state: (a) All printed portions shall be plainly printed; (b) there shall be a brief description of the policy on its first page and on its filing back; (c) the exceptions of the policy shall appear with the same prominence as the benefits to which they apply; and (d) if the policy contains any provision purporting to make any portion of the articles of incorporation or by-laws of the corporation a part of the policy, such portion shall be set forth in full.

E. A hospital service corporation may issue a group policy, provided the group of persons thereby insured conforms to the requirements of section 40-1109 (k) of the General Statutes of 1935, and provided such policy and the individual certificates issued to members of the group shall comply in substance with this section. Any such policy may provide for the adjustment of the rate of premium based upon the experience thereunder at the end of the first year or of any subsequent year of insurance thereunder and such readjustment may be made retroactive only for such policy year.

Sec. 6. The rates charged by any such corporation shall be filed with the insurance department. Premiums shall be payable in cash and no policy issued by such corporation shall provide for any assessment or contingent premium.

Sec. 7. Such corporation shall maintain unearned premium and other reserves upon the same basis as that required of domestic stock insurance companies transacting the same kind of insurance.

Sec. 8. Any director, officer or member of any such corporation, or any other person, may advance to such corporation any sum or sums of money necessary for the purposes of its business or to enable it to comply with any of the requirements of the laws of this state, and such moneys and such interest thereon as may have been agreed upon, not exceeding eight percentum per annum, shall be payable only out of the surplus remaining after providing for all reserves and other liabilities, and shall not otherwise be a liability or claim against the corporation or any of its assets. No commission or promotion expenses shall be paid in connection with the advance of any such money to the corporation, and the amount of such advance shall be reported in each annual statement.

Sec. 9. Such corporations shall be subject to the provisions of this act and to sections 40-214, 40-215, 40-216, 40-218, 40-219, 40-222, 40-223, 40-224, 40-225, 40-226, 40-228, 40-229, 40-230, 40-231, 40-235, 40-236, 40-237, 40-247, 40-248, 40-249, 40-250, 40-251 and 40-254 of the General Statutes of 1935 and section 40-227 of the General Statutes Supplement of 1939, except as the context otherwise requires, and shall not be subject to any other provisions of the insurance code except as expressly provided in this act.

Sec. 10. Every corporation organized under the provisions of this act is hereby declared to be a charitable and benevolent corporation.

Sec. 11. (a) No corporation subject to the provision of this act shall during any one year disburse more than ten per cent of the aggregate amount of the payments received from subscribers during that year as expenditures for the soliciting of subscribers, except that during the first year after the issuance of a permit, such corporation may so disburse not more than twenty percentum of such amount and during the second year not more than fifteen percentum. (b) No such corporation shall, during any one year, disburse a sum greater than fifteen percentum of the payments received from subscribers during that year as administrative expenses, except that during the first two years after the issuance of the permit, such corporation may disburse not more than twenty percentum of the payments received from subscribers. The term, "administrative expenses" as used in this section, shall include all expenditures for nonprofessional services and in general, all expenses not directly connected with the furnishing of the benefits specified in this act, but not including expenses referred to in subsection (a) hereof.

Sec. 12. Any such corporation shall pay the commissioner of insurance as a fee for the examination of the charter and other documents and the issuance of a certificate of authority the sum of ten dollars. The annual fee for the filing of the annual statement and the renewal for the certificate of authority shall be ten dollars.

Sec. 13. No provisions of this act or of any policy for hospital service, between a corporation subject to the provisions of this act and a subscriber shall in any way affect the operation of article 5, chapter 44, of the General Statutes of 1935 and amendments thereto constituting the workmen's compensation law.

Sec. 14. This act shall take effect and be in force from and after its publication in the statute book.

The officers of the Kansas Hospital Association are presently making plans for the institution of a statewide program under this act. (1941)

Editorial

National Emergency

For many years it has been customary for the JOURNAL to include in its December issue an editorial of well wishes for a Merry Christmas. Such an editorial in the December, 1941, issue would have only a hollow ring. With the death, destruction, and tragedy which exist in most of the civilized countries of the world and with the trials and tribulations which our own country will undoubtedly experience for an unknown number of future years, it is very clear indeed that this year no one can have the usual spirit of Christmas.

We have no doubt that the United States will win its part of the present war. It has the facilities and its people have the will and ability to accomplish that result. It is equally true, though, that every person in this country will need to contribute all-out assistance in making possible the united effort only through which victory can be accomplished.

A considerable part of this responsibility will fall upon the medical profession. The Army and the Navy will need a vast number of physicians who must be supplied from civilian sources either voluntarily or through selective service methods. There is no question but that this need will be supplied and immediately so. One of the proudest traditions of American medicine is the record that it has always quickly and loyally arisen to the assistance of our country in its hours of need. The procuring of the necessary number of physicians will create a civilian service problem of magnitude. Those who remain at home will serve their country through hours of extra work, through the maintenance of part time offices in unserved communities, and in countless other ways. Likewise, by reason of the methods of modern warfare the profession will find it necessary to become the source of leadership for development of civilian defense and for the care of possible civilian casualties.

First let us fill the ranks of the Army and Navy medical corps and then organize the home front.

Kansas medicine must accept its part of this obligation eagerly and effectively. It will do its part to "Keep 'em flying." (1941)

Editorial

Gramicidin and Penicillin as Chemotherapeutic Agents

Keefer reports clinical studies of gramicidin and his results indicate another chemotherapeutic agent useful for local therapy. Two substances have been separated from bacillus subtilis, the common soil organisms—gramicidin which is bactericidal for all gram negative organisms, and tyrosidin which is effective against both gram positive and negative bacteria.

Both substances are toxic, producing necrosis of the liver and kidneys and hemolysis of red blood cells when administered subcutaneously or intravenously, they are inactive when given by mouth, but are non-toxic when put in closed cavities or used as topical application. Chronic ulcers, mastoiditis and small, chronic empyema cavities, especially those caused by the hemolytic streptococci were successfully treated.

Dawson has produced similar results with penicillin, in infections due to gram positive organisms. Penicillin is derived from cultures of the fungus penicillium, it is non toxic, it is destroyed by acids and therefore cannot be given by the oral route, has produced successful results in cases of staphylococcus sepsis, pneumococcus endocarditis and hemolytic streptococcus septicemia. Streptococcus viridans endocarditis has so far been resistant to penicillin but probably because sufficiently large doses have not been available. Its clinical use is hampered by the small yield. The average daily dosage of 100 to 200 milligrams requires the processing of forty liters of culture broth.

These substances are not at present available for general use but they may represent a new class of chemical agents more important than the sulfonamides. (1942)

The Interrelationships between Medicine and Psychiatry—Fundamentals of Psychiatry I

WILLIAM C. MENNINGER, M.D., Topeka

Psychiatry is the specialized branch of medicine which is concerned with the study, the diagnosis, and the treatment of those illnesses of mankind which are characterized by conspicuous mental symptoms. Such a definition, however, is not sufficiently broad to include "the psychiatric point of view." By the psychiatric point of view we refer to an interest in and understanding of all of the activities and behaviors and interests of the human race. Just as the internist is interested in how the heart functions in health, so is the psychiatrist interested in how the total person functions in health. The practice of psychiatry used to be limited to the groups secluded in stone buildings on the edge of the village known as "insane asylums," but now a psychiatric interest extends into the office of the private physician, into our educational system, into our law courts, into our correctional institutions, and most important of all, into our general hospitals. The psychiatric point of view has become a necessity for every physician and every nurse, if they are to completely understand any sickness in any individual.

Every physician and every nurse is confronted daily with psychiatric problems, problems that require a psychiatric knowledge for their understanding. For example, the very sick individual with pneumonia may develop a delirious reaction which presents a more difficult problem of treatment than his lung condition. In hyperthyroidism one is often perplexed with the problem of restlessness, sleeplessness, and anxiety. The reaction to pain varies with the individual so widely that only with an understanding of his psychological makeup can it be interpreted. The average physician's daily practice includes those persons with functional heart difficulty, the person whose mind centers around some part of his gastrointestinal tract—the dyspeptic, the choleric, the constipated, the flatulent, and a host more. None of these individuals ordinarily come to the psychiatrist, or even need to do so, but they do come to the general physician or to the specialist. As a result of the treatment they receive these individuals either obtain gratification and relief, or start the rounds from doctor to doctor, or even worse, resort to the charlatan. Without a psychiatric point of view on the part of their physicians, these patients almost invariably follow the latter route.

Immediately when one begins to talk about psychiatry he needs a term to describe the individual from the psychiatric viewpoint. When the psychiatrist speaks of John Doe, he refers not merely to his mind or his intelligence or his emotions, but to all of these together, along with his skin, his muscles, his heart, his intestines, and the way they function. It is even more than just the physical structure, this term must embrace all his attributes—his loves and his hates, his play and his work, and his reactions to all those about him. To include all this in one word the psychiatrist uses the term "personality" and by it he means all that anyone has been, all that he is, and all that he is trying to become.

Thus, when a man functions in any way—physically, as in motion; physiologically, as in digestion; psychically, as in thought—it is an expression of his personality. The psychiatric viewpoint encompasses the observation, the correlation, the purpose, and the motive of every expression of any personality. This viewpoint covers far wider horizon than the actual field in which the psychiatrist practices, because it applies to all human beings. His major work is limited to those individuals in whom the psychic expression of the personality has become warped or distorted or perhaps even wrecked. But the psychiatric point of view must permeate all the fields of medicine, and the successful physician or nurse, whether he wishes to or not, must in some degree have a psychiatric viewpoint.

Psychiatry in Relation to the Total Field of Medicine

At the present time the more keen and alert leaders in the fields of medicine and nursing are aware of the necessity for groundwork and orientation in psychiatry. There is an increasing awareness also among the practitioners of medicine of the psychic component in all disease. This interest is still very limited, but it is definite and it is growing. One may understand the present point of view in light of the evolution of medical knowledge.

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Psychiatry in Relation to the Normal

Most of us pride ourselves on being "normal" individuals, not stopping to analyze what we mean by "normal." We recognize that the concept of disease

is based on an understanding of health, and yet when one talks about a "normal" individual either physically or mentally, he talks about a hypothetical individual. In some instances, "normal" means "average"; in some instances, it means efficiency, in some instances, it means majority.

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Psychiatry in Relation to the Healthy Individual

It is essential at the outset in the study of psychiatry to clarify one's conception that all mental disorders are not included in the group which the public calls "insane," and the group referred to as "neurotic"—those unfortunate individuals whose psychological jams express themselves in morbid fears or physical complaints. The same psychological devices which operate in these individuals also operate in a different quantitative degree in those of us who feel and act and appear as healthy individuals.

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Popular Misconceptions Regarding Mental Illness

Not only is it desirable at the outset for the student to understand the psychiatrist's concepts of personality, disease as a total organism reaction, normalcy, and mental health, but it is equally desirable to correct the more common popular misconceptions regarding mental ill health. In part because of historical influences, in part because of lack of adequate means of education, and in part because of the comparatively recent developments in the field of psychiatry, there are a great many misconceptions regarding mental illness among even very intelligent people. Paradoxically, many of these misconceptions are held by members of the medical or nursing profession, the explanation of which lies entirely in the fact that most of us had an inadequate training in the field of psychiatry in medical school or in the hospital. It seems advisable to clarify the more common of these misconceptions.

1. The misconception that mental sickness means that a person is irrational or beyond understanding, and that the sayings and acts of the mentally ill are nonsensical and incomprehensible. . . .

2. The misconception that hospitalized mentally sick people all rave and yell and run about and are violent. . . .

3. The misconception that mental sickness means that a person is dangerous to himself or others. This misconception is something of a popular superstition. Anyone who is "crazy" is supposed to be dangerous. . . .

4. The misconception that mental illness comes suddenly, that "something snaps," or that "one suddenly loses one's mind," and that there is no protection against this onslaught. . . .

5. The misconception that mental illness is a disgrace to be faced resignedly and with fatalism. Perhaps no other misconception is so widespread as the idea that mental illness in some way or other is a disgrace. . . .

6. The misconception that mental illness is incurable and patients are locked up in asylums for the rest of their lives. . . .

7. The misconception that a person is either "sane" or "insane" and that all "insanity" is the same. This statement really includes two misconceptions. "Insanity" is a legal term, rarely used by psychiatrists, and correctly applied only to those individuals who have gone through an examination and a court commitment to a public institution. . . . Many people have the idea that all types of mental illness are similar. . . .

8. The misconception that mental illness runs in strains through families from generation to generation. . . .

9. The misconception that mental illness is caused by emotional shock, injury, physical illness, childbirth, or similar occurrences. . . .

10. The misconception that a "nervous breakdown" is a disease of the nerves. . . . (1942)

The Kenny Treatment—with a Note on Its Use in Kansas Twenty Years Ago

KARL A. MENNINGER, M.D., Topeka

The great success of the "new" Kenny treatment for poliomyelitis has recalled to my mind an episode in Kansas medical history which may be worth recording. The techniques of the Kenny treatment were used in Kansas nearly twenty years ago and reported in this JOURNAL!

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In the JOURNAL OF THE KANSAS MEDICAL SOCIETY for October, 1923 (pages 278 ff.), in conjunction with articles by my father and my brother Will, I outlined a treatment for poliomyelitis which included (along with serum and other medical treatment) an outline for the treatment of the convalescent stage by "protection, muscle training, thermal therapy, and massage." The application of hot packs wrapped in woolen cloths wrung out of boiling hot water, covered with oiled silk and more wool, exactly as prescribed by Miss Kenny, is recorded. We treated numerous patients by this method, and I am happy to say that twenty years later not one of them, to my knowledge, is unable to walk and some of them are completely free from any residual symptoms whatsoever.

The chief credit belongs not to me but to a Swedish masseuse and physiotherapist who was associated with the Menninger Clinic at that time, Ingeborg Lindquist, now Mrs. Swanson, who was trained in the Royal Institute for Physiotherapy of Stockholm, Sweden. She brought this training to America, modifying her procedure somewhat in the light of the muscle training exercises developed by Frenkel of Germany and Miss Wright of Boston, at my suggestion. She came to Topeka and affiliated herself with us in 1921 and applied this treatment under our direction to our patients in Christ's Hospital.

Poliomyelitis has long since ceased to be any considerable part of the work of the neurologist or the psychiatrist but it is gratifying to know that neurologic and psychiatric principles, introduced to the author by a physiotherapist from Sweden and now reintroduced to this country by a nurse from Australia, have been taken over by the orthopedists and pediatricians of America to the great advantage of sufferers from poliomyelitis. (1942)

Kansas' First Physician Casualty

The first known Kansas medical corps casualty was listed in the November issue of the JOURNAL. Dr. Raymond Cunningham Stiles, thirty years of age, in the medical corps of the United States Army was killed in a crash of a United States Army transport on September 3, near Coamo, Puerto Rico.

Dr. Stiles, originally a Wyandotte County resident, attended the University of Kansas, was graduated from Baylor University College of Medicine in 1937 and interned in St. Margaret's Hospital in Kansas City in 1938 at which time he was a member of The Kansas Medical Society and of the Wyandotte County Medical Society. Recently he was stationed in the United States Marine Hospital in Buffalo, New York and before that at Ft. Knox, Kentucky. . . . (1942)

Shawnee County Medical Care Plan

RALPH W. CALLAHAN,* Topeka

When medical plans for the care of the medical indigent are mentioned, we still frequently hear individuals in the profession make substantially the following comment: "It's socialization of medicine and I don't want any part of it. I'll continue to contribute my services to the poor in the future as I have done in the past." It would be just as reasonable for the doctor who made this comment, to say of the new miracle drug "I've got along without it in the past and I will continue to do so in the future."

In the past twelve years many radical changes have taken place in our economic and socal life. The profession must keep pace with these economic and social changes as they have with the rapid advances of medical science during this same period. If we become isolationists or complacent in these matters and wait until the Federal Government sets up standards which are usually planned by lay persons and based solely on pure theory, you may depend on it that we will have socialized medicine in so far as the indigent and low-income group is concerned.

Fortunately a large majority of the profession in Kansas realize the need of organized medical plan for the care of the medical indigent and for the past few years have experimented with various types of plans, some good—some bad.

The so-called prepaid plan has been generally accepted by the profession as well as the State Department of Public Welfare, as socially and economically sound and superior to other types.

It has proven workable and retains the patient-physician relationship which is very essential. The Bureau of Medical Economics of the American Medical Association in their publication "Organized Payments of Medical Service" has this to say: "The principle of medical ethics is the only firm foundation on which to base a sound medical service. The county medical society is the only organization occupying the natural geographic unit and possessed of the necessary professional knowledge and the power to maintain the principles of medical ethics in the organization of medical service in a community." The county medical society is not only the logical unit on territorial and professional grounds, but it is also by tradition and discipline founded on the basis that "Reward or Financial Gain should be a Secondary Consideration."

Now that we are in the midst of a great war and face a serious shortage in the profession for care of the civilian population, it becomes more and more imperative that some sound plan be organized BY AND UNDER THE CONTROL OF THE MEDICAL SOCIETY for the care of the medical indigent. It should be obvious that a well organized plan, in addition to the many other things it will accomplish, will also greatly facilitate the handling of this type of case.

Space will not permit the argument for prepaid plan over the free basis at this time. There are several counties in the state now operating under plans quite similar to the plan of Shawnee County with perhaps the exception of the all important question as to who controls these plans, wherein lies the answer, the success of failure both economically and professionally. There is no sound argument regardless of the size of the county why the county society should not be in complete control.

After more than a year of negotiations, the Shawnee County Medical Society entered into an agreement with the Shawnee County Board of Social Welfare and the State Department of Social Welfare for the medical care of the indigent of Shawnee County. At that time Shawnee County had more than double the population of any other county that had at that time attempted to operate a similar plan. Several features which were new to Kansas and one which to the best of our knowledge is entirely original were tried. Many said in the beginning that the plan would not work; the county was too large and many other reasons, but after seven months the plan has worked and quite successfully.

The contract consists of seventeen paragraphs, the five basic paragraphs follow:

"Paragraph 3. RATE OF COMPENSATION.—That in consideration of the services to be rendered by Party of the Second Part, as hereafter set out, Party of the First Part guarantees that Party of the Second Part, thru their authorized agent, shall receive the sum of Three Dollars ($3.00) per month for each assistance grant on the county relief rolls as of the first day of each month.

"That all Old Age Assistance cases, Aid to Dependent Children cases, Blind Assistance cases and General Assistance cases may receive the benefits of medical care as herein defined from Party of the Second Part, if they choose to do so, by making payments at the rate of Three Dollars ($3.00) per month in advance except payment for all General Assistance cases as above provided shall be made di-

* Executive Secretary, Shawnee County Medical Society.

rectly to the Second Party by the First Party at the first of each month. If it appears expedient and practical for each case, lump sum payments may be made in advance. Such advance payments shall not exceed six (6) months and in the event death or ineligibility of the client effected, Party of the Second Party will refund all payments for the months following such death or ineligibility.

"That the agent of the Party of the Second Part, hereinafter named, shall furnish monthly to the Director of the Shawnee County Board of Social Welfare a list of names of the first three classes of assistance cases named in the preceding paragraph, namely, Old Age Assistance cases, Aid to Dependent Children cases and Blind Assistance cases whose payment is due and remains unpaid as of the tenth day of each month immediately after said date, and Party of the First Part shall pay in one payment to said agent of the Second Party on or before the tenth day of each month succeeding a sum equal to Three Dollars ($3.00) per grant for all assistance cases of all classes on the approved list of the Shawnee County Social Welfare Board who have not paid the preceding months payment directly to the Second Party's agent during the preceding month.

"Paragraph 4. FREE CHOICE OF PHYSICIANS.—It is mutually agreed by the parties hereto that all assistance cases, persons or patients effected by the provisions hereof shall have a free choice of physicians participating herein and in accordance with Section 5 of this agreement.

"Paragraph 5. SERVICE AS COUNTY PHYSICIAN.—That in consideration of said employment and the payment of the stated compensation, Party of the Second Part agrees to furnish ordinary and reasonable medical and surgical care compatible with the standards and ethics established by the profession and within the ability and scope of the participating physicians and within the customary and usual practice of the physicians participating in this agreement whereby the well being of patients is assured by providing them with the best possible medical care including ordinary and reasonable hospitalization, drugs and medicines, and specialized services, when such are approved by Party of the Second Part and when such drugs and medicines are included in a prescription issued to patients by participating attending physicians. It is understood, however, that the services above mentioned include only those which are deemed to be essential to the needs and welfare of patients and which are approved by Party of the Second Part.

"LIKEWISE: that the following services are not included therein: surgery and treatment not within the customary and usual practice of the Party of the Second Part's participating physicians; surgery and treatment for which necessary equipment, facilities or incidentals are not available or provided; dentistry, nursing; appliances including eye glasses, and services available thru other agencies. Party of the Second Part also reserves the right to require ambulatory patients to be treated and examined at designated times and places as is compatible with the circumstances of cases.

"Paragraph 8. TREATMENT OF NON-ASSISTANCE CASES.—That Party of the First Part will not be responsible for payments for services rendered persons or families not on County-approved Assistance list, or supplements thereto. Provided, however, that in emergency cases, for which, in the opinion of the Physicians' Committee, emergency treatment was necessary, and investigation by the County Director discloses that the case is eligible for assistance, Party of the First Part will pay for such emergency medical or surgical care, to the agent of Second Party, in lieu of the payments set out in Section 3 above, at the unit rate set out in the fee schedule hereto appended, and at the par value of One Dollar ($1.00) per unit. Provided further, that if treatment is needed by other non-assistance cases, and cases defined above as emergency cases, for which continued medical care is required following the emergency care and which are approved as eligible for assistance by the County Director, such treatment will be furnished by Second Party upon such cases being placed on the assistance rolls. Said payments for both types of cases to be paid to agent of Second Party and not to any individual of Second Party. It is further agreed that no cases not otherwise approved for assistance will be approved by First Party for medical assistance only, except as provided in this paragraph.

"Paragraph 14. LIABILITIES.—It is specifically understood and agreed that the physicians participating in this agreement are not partners and that they do not, by the execution of this agreement assume any of the rights or liabilities incident to a partnership. It is further understood that each physician shall be solely responsible for his diagnosis and treatment of such patients as shall come under his care and shall not be held liable by any one for the negligence of any other subscribing physician, whether such negligence arises out of the treatment of patients pursuant to this contract or otherwise."

Several months prior to the signing of the contract, a Social Medicine Committee was appointed and given full power to act on all matters concerning the proposed plan. After the acceptance of the contract, five subcommittees were formed, the members of the social committee acting as chairmen of the Sub-Committees on Drugs and Supplies, Clinic, Hospital, Unit Audit and Appeals and Complaints. The Sub-Committees handle various matters coming under their division as indicated. The General Social Medicine Committee meets regularly each week.

This committee acts on recommendations of the subcommittees and executive secretary, establishes policies and transacts such other business as it deems necessary and advisable.

One of the early acts of the Social Medicine Committee was to send out a questionnaire to all members of the society requesting that they indicate their perference as to the capacity in which they wished to serve. With one or two exceptions every member of the society responded. Working from this questionnaire, twenty eight members were assigned to home-call service, forty to the clinic staff and eleven for specialized services in their office or at hospitals. The Shawnee County Medical Society was particularly fortunate at this step of the organization as the city of Topeka turned over to the society all the facilities in their new modern and moderately equipped city clinic rooms. With these facilities the society was able to set up fourteen specialized clinics in addition to the general medical clinic which is held daily.

The specialized clinics are held once or twice each week and the entire staff is composed of forty doctors each one serving an average of two hours each week. In addition to the medical clinic the following Clinics are now in operation: Surgery, Gynecology, Eye, Ear, Nose and Throat, Pediatrics, Proctology, Tuberculosis, Child Welfare, Diabetic, Neuropsychiatry, Prenatal, Dermatology, Urology, Cardiology, and Venereal Disease.

As a general rule all ambulatory patients are required to report to the clinic for examination and treatment. When home calls are required the patients are allowed free choice among the twenty-eight physicians who have volunteered for this type of service. When surgery is required, the patient may also choose any surgeon in the society to perform such surgery as is required.

A dispensary is also maintained at the clinic where a druggist is employed by the society and fills the prescriptions during clinic hours. After clinic hours emergency prescriptions are either filled by the druggist authorized by the society or supplied by the attending physician from a kit issued by the dispensary. The average number of prescriptions issued in a month is around eighteen hundred.

The attendance at the clinic averages about fourteen hundred monthly; five hundred and fifty home calls are made monthly and three hundred seventy-five patients are seen in the various offices; an average of thirty-four patients are admitted to the hospital each month; average time in which these patients are in the hospital is approximately fourteen days.

After all funds from all sources have been received, for any given month, all bills are paid first; a small reserve set aside and the balance is then distributed to the individual participating member on a unit basis in accordance with an established fee schedule for services rendered.

Space will not permit further detail of the various activities. However, under this set-up the members are able to give the patients far better service than this class of people have received in the past. Since this work is co-ordinated the profession is able to do this more efficiently and with less effort for the same results. They have also been able to receive some small compensation for their efforts and a small reserve to tide them over in case of emergency. While the fine co-operation of the Shawnee County Welfare Department made the establishment and continuation of the plan possible, the major credit for the successful operation belongs to the Social Medical Committee who established the policies, and the fine co-operation of the individual members, all of whom have donated liberally of their time and services. (1942)

The Years When The Headlines Told The Story

Raymond C. Stiles, first member of The Kansas Medical Society to become a casualty in World War II.

Winter General Hospital, Topeka, opened in 1943.

December 8, 1941
The United States declares war on Japan.

April 18, 1942
First U. S. warplanes, effect successful bombing raid on Tokyo.

June 6, 1944
American, British and Canadian Troops, land in Northern France.

June 6, 1944
Full scale invasion operation drives nine miles inland in first day of action.

May 7, 1945
Unconditional surrender of Germany, ends European phase of the war.

August 15, 1945
Japan surrenders unconditionally. Formal signing of surrender terms, made on September 2, 1945, thus ending World War II.

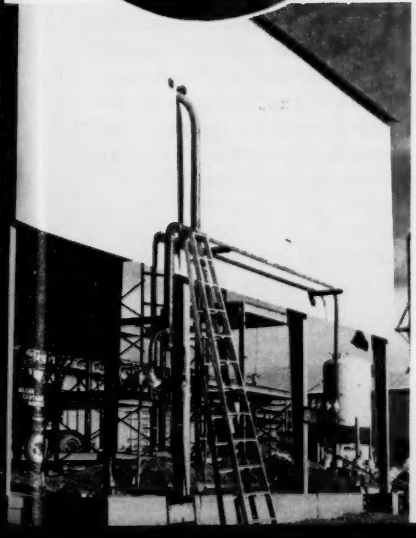
...And In The 50's Kansas Is In The National Spotlight

Eisenhower Memorial, Abilene, Kansas, opened in 1954. A nation-wide tourist attraction as it houses the President's collection of souvenirs and mementos assembled during his long military career.

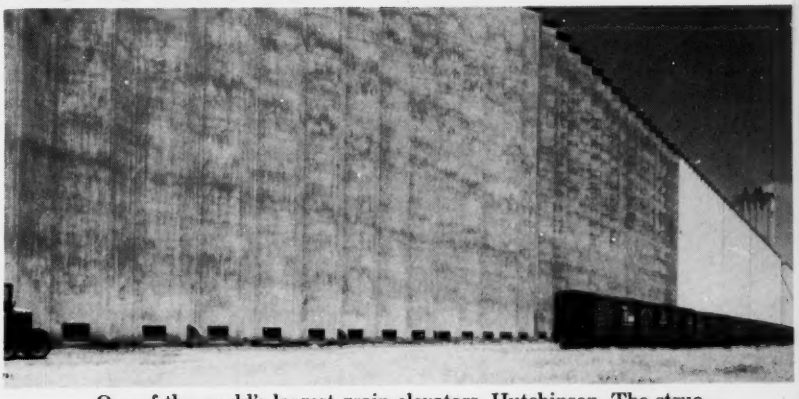
The President and Mrs. Eisenhower arriving in Abilene for an inspection tour of the Eisenhower Memorial Building, in the fall of 1958.

Stars of the popular TV program, "Gunsmoke," attending the Front Street celebration at Dodge City, (October, 1958).

The completed restoration of Front Street in Dodge City, Kansas, (1958).



A view of The Callery Chemical Company, during construction, 1957. The concern manufactures fuel for jet engines and rockets.



One of the world's largest grain elevators, Hutchinson. The structure is a half mile long and has a capacity of 17 millions bushels of grain.

Effect of Sulfonamide Therapy on the Common Cold

LIEUTENANT A. J. KAUVAR and
LIEUTENANT COLONEL FRANK R. MOUNT, Fort Riley

It is generally conceded that chemotherapy has no beneficial effect in the treatment of most virus diseases, common upper respiratory infections, or the recently described primary atypical pneumonias. A brief review of the literature failed to reveal any controlled observations on the use of chemotherapy in the common cold. Prompted by the clinical impression that the dangers of sulfonamide therapy far outweighed any advantages that might be obtained from its use in the common upper respiratory infections of unknown etiology, a study was instituted to clarify this point.

The clinical data presented here are based on a study of 127 patients from the Medical Service of the Station Hospital, Fort Riley, Kansas, admitted between November, 1942, and January, 1943. These patients were divided into two groups: (a) Seventy-five cases . . . were treated symptomatically, and without the use of sulfonamides. (b) Fifty-two cases . . . were treated with one of the sulfonamide drugs in addition to the symptomatic therapy instituted in the first group. The history, clinical and laboratory findings have been studied in an effort to determine whether the use of chemotherapy had any beneficial effect in altering the course of the disease. . . .

It is apparent from the cases studied here that the use of chemotherapy as a routine in uncomplicated respiratory infections had no effect in altering the course of the disease. The hospital stay of the patients receiving chemotherapy was not shortened to any appreciable extent. . . .

If chemotherapy has no effect in shortening the course of the disease or in preventing complications, there would seem to be no justification for its use in the common cold. Although we were extremely fortunate in not having had serious complications secondary to the sulfonamide administration, mild reactions were present in three cases. Complications secondary to chemotherapy administration are probably more frequent than the complications that may develop in the untreated common cold. It has been estimated that one in 1,000 patients with colds will develop pneumonia, whereas the complication rate secondary to sulfonamide administration is much greater. Furthermore, the complications secondary to sulfonamide administration in a sensitive individual may be extremely serious as has been shown many times. Thus the complications of sulfonamide therapy may not only be more serious than the complications of the common cold, but also more frequent.

Furthermore, there is increasing evidence to the effect that numerous pathogenic bacteria may acquire a tolerance or resistance to one or more of the sulfonamide compounds. They then become able to multiply in the presence of the usual bacteriostatic concentration of these agents. Consequently, sulfonamide-fast infections often do not yield to many times the usually successful therapeutic doses of sulfanilamide, sulfathiazole, or sulfadiazine. Generally speaking, this acquired sulfonamide fastness is believed to be due to increase production of sulfonamide inhibitors by the organisms.

This immediately suggests that there may come about the selective propagation of drug resistant bacteria. It is conceivable that the dissemination of these resistant organisms by carriers will ultimately curtail the value of sulfonamide therapy.

In addition, there is a growing body of evidence, clinical and experimental, indicating that the number of toxic reactions following sulfonamide therapy is much greater in those individuals that have previously received one of the sulfonamides. Consequently, the use of chemotherapy in a trivial case may sensitize the individual so that its use is contraindicated in a more serious illness where its use is urgently needed. . . .

It would seem wiser to reserve the use of chemotherapy for those cases where a proved therapeutic indication exists. It should not be withheld in those severe upper respiratory cases where fever and symptoms show a tendency to increase along with increasing leukocytosis and evidence of spread of the infection into the parenchyma of the lung, by either physical or roentgen examination. (1943)

Thiouracil in the Treatment of Hyperthyroidism

ROBERT E. BOLINGER, M.D., Kansas City

The clinical use of thiouracil in the treatment of hyperthyroidism is unique in that it is apparently the first example of a synthetic drug which actually specifically depresses the action of an endocrine organ. Furthermore, it is another interesting example of a clinically useful drug which evolved from the extensive reservoir of experimental biology and medicine. Indeed, twelve years ago the first references to this subject were relegated to the abstract and considered only incidental to the main problem, i.e. etiology of goiter. These references were concerning an epidemic of goiters in laboratory rabbits, the cause of which was found by Webster to be the large amount of cabbage in the diet. The effect was independent of the iodine content. A conjecture at this time, later contradicted, was that a cyanide in the cabbage was the active agent, causing a depression of tissue metabolism and compensatory hyperplasia of the thyroid tissues. In 1938 it was shown by Sharpless that a similar condition could be produced by feeding a soybean diet, and later the range of goitrogenic foods included all of the Brassica seed vegetables. Attempts to show similar effects by pure chemicals were then undertaken. Enlargement of the thyroid was produced by feeding sulfaguanidine to rats and also by feeding phenylthiocarbamide.

Systematic investigation of these drugs and their properties was undertaken in 1943 by Astwood. An important feature of his work was the emphasis on the systemic effects of these drugs, showing a definite decrease in rate of oxygen consumption and metabolism. The old idea of depression of tissue metabolism then became untenable, because the metabolic depressant effect was reversed by feeding desiccated thyroid. The drug having the most powerful depressant effect was 2-thiouracil (2-thio-6 oxypyrimidine). Other substances which were active were thiobarbituric acid, aniline, sulfa drugs and thiocyanates.

It was also found that iodine would reverse the metabolic depressant effect in some and not affect it in others. Thiouracil belonged to the latter group.

In 1943 Astwood reported the first cases in which the drug was used clinically. There were three cases, all showing an abrupt reduction in metabolism to normal or below and marked relief of symptoms. The only toxic manifestation was a transient leukopenia relieved by withdrawing the drug. Nine cases were reported by Williams and Bissel. These also showed a very favorable response. In most of these cases surgery was not used. Eleven cases were reported by Bartels in which the drug was used preoperatively.

In our clinic the drug has been used on several cases selected at random, and six of these are described below. In several of our cases here we have combined x-ray irradiation of the gland with the drug. This we believe aids greatly in reducing the actual size of the gland.

Case Reports

Case I—E. W., a fifty-seven-year-old white male, treated as an out-patient. The patient's history dated back to 1937 when he had loss of weight, palpitation, shortness of breath, and some swelling of the ankles. Exophthalmos was present at that time and also a large goiter. At that time in another clinic he was diagnosed as exophthalmic goiter and placed upon Lugol's solution and digitalis. He improved to some extent, but after some time his symptoms recurred and became progressively worse until he was seen here February 5, 1944. At that time he was edematous, dyspneic, and totally unable to work.

Physical examination revealed a typical exophthalmos and marked diffuse goiter. Obvious dyspnea and edema were present. Pulse rate was 100 and BMR was plus 48. Weight was 150. Electrocardiogram at that time showed an inversion of the T wave in leads 1 and 4-F, and a depressed ST take-off in lead 2.

The patient was started on thiouracil, 0.6 gram daily. X-ray therapy was started and a total of 744 RU given until March 15, 1944. In about a week there was a distinct improvement in the symptoms although the patient was ambulatory. On February 15, 1944, the BMR was plus 40 and the pulse had fallen to 80.

On February 25 the BMR was plus 30. By March 15 the BMR was plus 5 and the pulse was 70. Weight had gone to 170 pounds. The patient was relieved of his symptoms and able to return to work. The goiter itself had decreased to about thirty-five per cent of its original size. The electrocardiogram on April 18 showed an upright T wave in all leads and a normal ST take-off in lead 2.

The patient at present is on 0.2 gram of thiouracil daily and doing very well. He was treated as an out-patient at all times.

Case II—G. K., a twenty-eight-year-old white female seen as an out-patient on January 15, 1944. This patient had been complaining of nervousness, palpitation, and loss of weight of gradual onset.

Physical examination revealed a moderate amount of exophthalmos and a diffusely enlarged thyroid. Pulse was 120; blood pressure, 160/90; BMR, plus 58; weight, 118 pounds. The electrocardiogram showed some depression of the ST take-off. The patient was started on 0.8 gram of thiouracil daily and small doses of calcium iodide. Within ten days the patient felt better. On February 15, 1944, her findings were as follows: pulse, 105; blood pressure, 140/70; BMR, plus 45; weight 130 pounds.

On March 15, 1944, she felt practically well and her findings were: pulse, 90; blood pressure, 145/70; BMR, plus 30; weight, 135 pounds. Her goiter had decreased some, but not enough, so x-ray treatment was started as in the above patient. The dosage of thiouracil was cut to 0.3 gram daily. By April 15, 1944, the patient felt entirely relieved of her symptoms and complained of gaining too much weight. Her pulse at that time was 80; blood pressure, 130/70; BMR, plus 12; weight, 139.5.

This patient is still being followed and is on 0.2 gram of thiouracil daily.

Case III—G. V., forty-seven-year-old white male, admitted to the hospital on May 16, 1944. Symptoms began three years prior to admission with weakness and nervousness, which became progressively worse until admission. He had loss of thirty pounds of weight and experienced palpitation of the heart.

Physical examination revealed moderately severe exophthalmos, a tremor, and large diffuse goiter. Orthopnoea was present. There was auricular fibrillation. Pulse rate was 100 and the cardiac rate was 118; blood pressure was 140/80; BMR, plus 61; weight, 124; cholesterol, 188 mg. per cent.

The patient was then given thiouracil, 0.4 gram daily, and little improvement was seen until the dosage was increased to 0.6 gram daily on May 20, 1944. On May 27, 1944, the findings showed BMR to be plus 39; pulse, 72, but still fibrillating; cholesterol was 230 mg. per cent. At this time he felt much better and there was a definite reduction in exophthalmos and tremor. On June 5, 1944, the patient showed a pulse which was still fibrillating but at a rate of 80 and no pulse deficit. BMR then was plus 30 and cholesterol was 232 mg. per cent. Little change in weight was observed. X-ray to the thyroid was started on June 1, 1944.

This is a fairly resistant case but has shown definite improvement.

Case IV—C. S., twenty-nine-year-old white female, admitted to the hospital. Her complaint was nervousness, loss of weight and a "pop-eyed" expression. She had experienced these symptoms for about a year.

Physical examination revealed an apprehensive female with severe exophthalmos and moderate diffuse enlargement of the thyroid. Tremor was present. Pulse was 135, BMR was plus 59. Weight changes were insignificant.

She was placed on 0.6 gram thiouracil daily on March 20, 1944. On April 3, 1944, her pulse was 105 and the BMR, plus 38. She was feeling much better. On April 10 she had a pulse of 90 and a BMR of plus 33. The patient went home and in the meantime ran out of the drug. She came back a month later for operation, having been out of the drug for ten days. Her condition was essentially the same as when she left. She was operated on with an uneventful recovery.

Case V—L. T., sixty-five-year-old white female, admitted to the hospital on May 21, 1944. Her complaint at that time was chronic arthritis of about ten years duration and nervousness which began about four years ago. The nervousness described was characterized by a tremor of the hands and inability to sleep. She had had some dyspnea on exertion and some ankle edema, which was present at the end of the day.

Physical examination revealed a fairly well nourished white female who was not acutely ill. The head was essentially negative. Examination of the neck revealed that the left lobe of the thyroid was enlarged, firm and freely movable; this enlargement measured about six cm. by two cm. Examination of the chest revealed that the heart was normal in size and had a systolic murmur at the base, transmitted into the neck. Blood pressure was 155/85. About a one plus edema of the ankles was present. The pulse on admission was 120. Basal metabolic rate was plus 46. The patient was found to be a mild diabetic. A diagnosis of toxic nodular goiter was made, and it was advised that she have the adenoma removed. However, the patient was adverse to this, and the following regime of treatment was instituted: She was given small doses of digitalis, not to produce complete digitalization by any means, and was placed on thiouracil, at first 0.1 gram three times a day, and in three days this was increased to 0.1 gram six times a day. She was given no iodide and only small doses of phenobarbital as supportive treatment.

On May 31 the patient was dismissed from the hospital. At this time her basal metabolic rate was plus 20 and her average pulse rate was about 85. Clinically she had improved greatly, there was no dyspnea present, and the ankle edema had subsided. The follow-up study on the patient approximately a month later revealed that she was feeling even better and had had no recurrence of her symptoms at all. At this time she was ambulatory and had been taking doses of thiouracil ranging between 0.3 and 0.6 gram daily. Basal metabolic study done in another laboratory at this time showed little change.

Case VI—W. J. twenty-year-old colored female,

admitted to the hospital on June 5, 1944. Her complaint at that time was nervousness, weight loss, with ravenous appetite and dyspnea. Her illness started about two months before admission, with a weight loss which was present in spite of a ravenous appetite. She became nervous and could not stand small noises; she was restless and could not sit still. She had some shortness of breath in bed. She had developed a dry, hacking cough in the two weeks before admission, had lost twenty-eight pounds during the past two months, and had noticed a large mass in the neck.

Physical examination revealed an emaciated colored female who appeared to be very nervous. Her eyes showed a moderate amount of exophthalmos. Head was otherwise normal. In the neck there was a firm, movable, non-tender thyroid, enlarged to about three times the normal size. Both lobes were enlarged equally. Examination of the heart revealed a rapid rate and a functional systolic murmur at the apex. No other abnormalities were found here. The abdomen and extremities were essentially normal. The tremor of the hands was very fine and not related to intention. Mosenthal test was done on the patient and revealed poor concentration and poor elimination of the fluid. Also, her cholesterol was 328. It was felt that this, in connection with the increase of slight ankle edema and the poor results of the Mosenthal test, would indicate the patient had some degree of chronic glomerulonephritis. In addition, the x-ray findings revealed a minimal amount of tuberculosis in the apex of the lung, the activity of which is not considered to be very great.

Her basal metabolic rate on admission was plus 61, and her pulse was 130. Her weight at that time was 107. The patient was started on thiouracil and given 0.8 gram of the drug daily in divided doses. She was also given phenobarbital and Lugol's solution.

On June 12 her basal metabolic rate had fallen to plus 36. At this time the patient's weight was 106 pounds, and her general condition seemed to be a little better. However, she was still very toxic. Her pulse had shown no improvement at this time. On June 20 her basal metabolic rate was plus 34, she began to show more improvement, and the average daily pulse rate was about 100. Her weight was then 108. We felt that the effects of thiouracil were definitely noticeable. On June 26 her basal metabolic rate was still about 34, and the average daily pulse was running around 95. Her weight had begun to take a definite rise and was now up to 112 pounds. About June 15, passive edema of the ankle was noticed. This lasted only about one day, and it was felt that it was probably due to the large dosage of the drug which was being administered. Transient edema was reported by Astwood. On July 3 the BMR was plus 11 and the pulse was 92. The weight was up to 115.

This patient is still being followed in the hospital, and it is felt she is a fairly resistant case. It must be remembered that her case was complicated by a chronic nephritic condition and a tuberculous condition of questionable activity. These two factors may have something to do with the resistance. However, definite improvement has been noticed, as shown by the above description.

Discussion

In evaluating clinically the significance of this new drug, we must take into consideration the clinical benefits that have been derived in the past from the usage of Lugol's solution, bedrest, and phenobarbital. In these cases treated in this hospital we have noticed, however, several differences between the thiouracil and the iodine treatment:

(1) The effects of the thiouracil appear to be manifest even though the patient is ambulatory and not treated as a bed patient. This is illustrated in cases I, II, and V.

(2) The patient does not seem to become tolerant of the drug as he does with iodine. In fact, in several cases here that we have followed long enough, the dosage of thiouracil has actually been cut down rather than increased, as it has to be with the Lugol's solution. This is illustrated in the cases above, namely I, II, and V again.

(3) Thiouracil seems to produce results in patients who are resistant to iodine as well as in those who are not.

(4) We have noticed a definite but variable latent period in the effects of the thiouracil. Almost uniformly in our cases here there has been a definite improvement in the clinical symptoms before there have been any of the objective findings, such as the basal metabolism and the pulse and blood pressure.

With the facts in mind, we believe that thiouracil has a definite place clinically in the treatment of hyperthyroidism. In fact, we believe that in many cases it has definite advantage over the use of Lugol's solution and in some cases it is apparently satisfactory in the treatment of even those with severe toxicity in lieu of operation. The indications are that the drug may entirely correct the physiological and functional manifestations of the disease. Surgery would then be limited to the removal of the enlarged gland, or in other words, the correction of the mechanical factor. Cases I, II, and III illustrate very nicely the use of x-ray in correcting the mechanical factor. In all these cases a very good result was obtained, and at

the same time did not expose the patient to the danger of surgical operation. However, any final conclusion regarding the prolonged clinical usage of this drug will have to await further follow-up on these patients. Only a follow-up over a long period of time will give us an idea of the permanency that can be expected from its use. In every case here in which the drug has been tried, we have noticed a definite improvement providing the drug was continued long enough.

ADDENDA—Since this paper was submitted for publication, case III has gained 25 pounds, the heart has stopped fibrillating and the rate is 72; case VI has gained 10 pounds more and her BMR became 0 in addition to complete amelioration of symptoms. (1944)

Editorial

Kansas Physicians' Service

Kansas Physicians' Service has become a corporate entity. By virtue of authority granted in the recently enacted Non-Profit Medical Service Corporation Act, the corporation was formed in Topeka on May 5 and the primary phase of organizing the medical service plan for the people of Kansas was completed.

Results of the two years of research by the Committee on Medical Economics, presented in the form of a tentative plan based upon study of the plans now operating successfully under medical society sponsorships, were approved by the Board of Councilors and recommended for adoption. By executive order of our president, a group of incorporators was formed from the entire membership of the council, including also the new president and president-elect and the chairman of the Committee on Medical Economics. After completion of the legal steps toward organization of the corporation and preparation and adoption of the necessary documents to file for a charter, the incorporators met as the temporary Board of Directors and elected the following officers: Dr. Barrett A. Nelson, president; Dr. John L. Lattimore, vice president; Dr. W. M. Mills, secretary-treasurer; Oliver E. Ebel, executive vice president. Within 60 days the temporary Board must have obtained nominations from each county medical society and a permanent Board of Directors shall be elected with representation from each councilor district.

The council-approved plan, subsequently endorsed by the House of Delegates, follows closely the directives laid down by the 1944 House of Delegates when it acted on the preliminary report of the committee. It provides medical services for the more serious illnesses, surgical services including fractures and dislocations, obstetrical services, and limited diagnostic x-ray services. Complete coverage is offered to the lower income groups of surgical and obstetrical services, with payment of benefits to be applied as indemnities against the usual and ordinary fees charged by any physician for those in the upper income levels. Strict adherence is maintained to continuance of the time-tested patient-physician relationships. There is completely free choice of physician. Any physician is free to accept or reject any patient, as always. No effort or suggestion is made to change any phase or detail of the physician's position with respect to his patient, except to offer a proven method of aiding the patient to obtain his services in a manner relieved of the financial stresses of our present fee-for-service system.

The plan is based on a Schedule of Benefits carefully selected after consideration of wide experience. It is believed to offer the average fees charged to patients of the so-called middle class, reduced by approximated credit losses and collection costs. This schedule then makes possible the offering of this saving to the patient at the same time rendering the physician his usual return, free from the uncertainties, worries and harassment of his former methods of charging and collecting for his services.

In a broader sense the plan fills an even more important, a sociological role. Under our plan the people of Kansas are offered a better, more readily obtainable, and an expanded medical service. Just as hospital service has become accessible to many from whom it was denied before Blue Cross plans came into effect (even to the point of over-crowding hospitals and making expansion of hospital facilities necessary), so now it will follow that the highest type and quality of medical and surgical services shall be available to large numbers whose economic status formerly restricted their ability to obtain such services.

Kansas medicine has asked for the opportunity to offer its answer to the widespread demands for a method to relieve the economic burdens of sickness through a method of budgeting payments. Kansas medicine, convinced that the interests of the patient

can best be served by vesting control of such proposals in the medical profession, has galvanized its beliefs into action and proposes to prove that we offer a better, more acceptable, more American method, in a non-compulsory, voluntary, non-profit plan which pays cash dividends to no one, protects the interest of the patient, is free from political interference and coercion and cannot be used to wield political influence or win political favor, not to mention siphon off to political or other purposes large fractions of the patient's medical dollar instead of converting that dollar directly into the medical service for which it was intended.

To bring the benefits of the plan to full fruition will require gradual growth and some time. Expansion must be on sound principles with gradual adjustment and re-adjustment to fit the peculiar needs of our own notably individualistic population. Further, and of vital importance, complete success requires full co-operation of our society membership. Kansas Physicians' Service is merely the agent for the participating physician, contracting for him with the patient. It is the participating physician who offers the service, who is behind the plan and who guarantees its effectiveness and success. Success of the plan depends entirely on the prompt and complete co-operation and support of every member of the Kansas Medical Society.

Participating Physician's Agreements will shortly be in the hands of every county society secretary, together with copies of the By-laws of the corporation, and the Subscription Agreement which sets forth the benefits to be provided and all attendant conditions. These have been carefully considered and approved by our Committee on Medical Economics, our Board of Councilors and the state society officers. They will be subject to administration and effective use as well as reconsideration and revision from time to time, by the Board of Directors which represents every councilor district. The Board of Directors can act effectively only if it is backed by the full membership. It is imperative, therefore, that each Participating Physician's Agreement be promptly signed and returned to the Topeka office.

Delaware boasts that 98 per cent of her doctors are signed up as participating physicians. Give that kind of support to Kansas Physicians' Service and it can only succeed in fully accomplishing all the objectives it has raised, confident with complete faith in the fundamental soundness of the principles upon which it is founded.—*Barrett A. Nelson, M.D., President, Kansas Physicians' Service.* (1945)

Editorial

German Measles and Congenital Defects

In 1941 a report from Australia first called attention to the possibility that certain congenital malformations in an infant might be traceable to German measles occurring in the mother during the first trimester of pregnancy.

The Australian report studied a series of 78 infants in whom congenital cataracts occurred. In 44 of these a congenital heart lesion was also present. Almost without exception the mothers gave a history of rubella during the early stages of pregnancy.

In a later series of 31 mothers who gave birth to children with congenital defects, all but two had German measles during the first three months of pregnancy. Twenty-five of these had rubella during the first two months and all later gave birth to infants with congenital defects. Only 50 per cent of the mothers who developed rubella during the third month of pregnancy had congenitally defective children.

In August, 1944, Benjamin Rones, M.D., published an article on this subject in Medical Annals of the District of Columbia. He reviewed his cases in the light of this possibility and found the same situation to exist. Dr. Rones closes his article with these two paragraphs:

"It is not to be understood that all cases of congenital ocular abnormalities are due to an exanthematous disease in the mother during pregnancy. Undoubtedly many other factors can operate to produce such disturbances. However, Swan et al. claim that all mothers with such exanthemata during the first two months of pregnancy will give birth to children with congenital abnormalities, and certainly my own findings tend to bear him out.

"Rubella has been regarded as one of the most innocuous of the exanthematous diseases. We are now faced with the fact that the virus attacking a pregnant woman before the placental barrier has been developed can cause a disturbance to the developing fetus, and particularly to the optic buds."

Last month the *Journal Lancet* added two more

case reports to the 122 described in earlier articles. This paper, by Forrest H. Adams, M.D., University of Minnesota Medical School, agrees in substance with previous opinion on the subject. Dr. Adams advises that "every attempt should be made to prevent exposure to such a disease. If exposure occurs in spite of precautions, such prophylactic measures as administration of pooled convalescent adult serum should be given a trial."

Here also is gathered a bibliography including 14 papers which could serve as a basis for someone wishing to investigate the subject further. Discussions on this topic have been heard in widely separated areas of Kansas. Opinions and statistics have been added locally to existing information.

The JOURNAL will welcome a scientific paper on this subject. Perhaps such a paper could come from a study made jointly by the Child Welfare and Maternal Welfare Committees, thereby adding the benefit of statewide investigation. (1945)

Penicillin and Streptomycin—a Review of Their Current Uses

HERBERT A. WENNER, M.D., Kansas City

Antibiotics are substances prepared from the products of certain living organisms, particularly fungi. Some of these substances exert a powerful antagonist effect upon the life and growth of specific bacteria. Emmerich and Loewe in 1899 isolated a substance from *Pseudomonas aeruginosa* which inhibited the growth of diphtheria, cholera, plague and typhoid organisms. They called this substance pyocyanase. Pyocyanase was not of clinical value in as much as it poisons animal cells. In 1929 Fleming observed that a mold which had contaminated his culture plates lysed staphylococcal colonies. His inquiring mind led him to the knowledge that this mold, later identified as Penicillin notatum, Westling, produced a substance which inhibited the growth of pyogenic cocci and the diphtheria-group of bacteria. The colityphoid and influenza bacilli were unaffected. Fleming gave to this antibacterial substance the name penicillin. In these early years following the discovery of penicillin few clinical trials were made and the substance was used by Fleming as a bacteriological tool.

In 1935 Domagk reported that sulfamidochrysoidine, which is hydrolyzed in the body to sulfanilamide, protected mice against fatal doses of streptococci. A large group of sulfonamide drugs was soon made and used widely in treatment of infectious diseases. A few investigators notably DuBos in America and Chain and Florey in England searched for bacterial antagonists produced by natural enemies of bacteria occurring in Nature. DuBos in 1939 developed in soil a bacterium which following autolysis inhibited the growth of a variety of gram-positive bacteria *in vitro,* and under stated conditions afforded a high degree of protection to mice inoculated with virulent pneumococci. Three active substances were prepared from the bacterial autolysate. They are named *tyrocidine hydrochloride, gramicidin,* and *tyrothricin.* All three substances show clear cut inhibition to gram-positive bacteria *in vitro.* Unfortunately they are injurious to some animal cells, particularly the red blood cell; hence, clinical use of these drugs is of limited value.

In 1940 Chain, Florey and associates cooperated with Fleming in studying the therapeutic value of penicillin. It was quickly appreciated that in penicillin a substance had been found which had heretofore unexcelled bacteriostatic power, particularly in regard to staphylococci, streptococci, gonococci, and clostridia. Moreover, its index of toxicity to living cells was very low. War casulties required large quantities of a drug such as this be made available, and within a short time huge quantities were produced in this country.

The search for new antibiotics continued (Table I). Schatz, Waksman and Bugie found that *Actinomyces griseus* elaborated a substance which inhibited *in vitro* the growth of gram-negative bacteria. This substance they named streptomycin. Other antibacterial substances have been found, among them streptothricin, flavicidin and subtilin. These substances are not in use currently to treat disease in man because they are poisonous, or they have no advantage above those in use.

Use and Limitations of Antibiotics in Infectious Diseases

The recognition of disease leads to proper application of remedies, and other means failing wisely provides for termination of useless treatment. Penicillin and sulfonamides are widely used and not always wisely. The indiscriminate use of these sub-

stances in fevers of obscure etiology is to be condemned, for reasons which are obvious. When small doses of these drugs are given there is the risk that sensitive strains will be weeded out and a heartier race of bacteria survive to resist large doses of these drugs. Also in grave infections with apparently trivial onset the administration of antibiotics may obscure the true nature of the infection and valuable time is lost in instituting proper treatment.

The use of antibiotics in the treatment of infectious diseases should be supported by bacteriological studies. These studies must be directed by the clinician in order that the bacteriologist may know how to start his search. Cultures of body exudates and discharges, and blood cultures reveal pertinent and occasionally surprising information.

Moreover, it is necessary from time to time to determine the sensitivity of the infecting organism to sulfonamides, penicillin and streptomycin. This is not always essential, since the range of sensitivity of organisms to these drugs has been explored, and the dose necessary to control infection caused by susceptible organisms known, at least in part. Bacteria become resistant for reasons to be stated later. Hence, when the patient is not responding as expected, it may be informative to know the sensitivity of the bacterium causing illness. It may be desirable also to learn what concentrations of these drugs are present at a given time in the blood stream. Simple methods for these determinations will be described.

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Action of Penicillin and Streptomycin Against Bacteria

Susceptible Bacteria. A wide variety of infections is caused by bacteria against which penicillin and streptomycin are fully effective. Some of the bacteria susceptible to these drugs *in vitro* are listed on Table II.

There is wide variation in the sensitivity of bacteria to penicillin and streptomycin. Members of alien races differ in resistance to these drugs; members in the same tribe and species are unequal in sensitivity to streptomycin and penicillin.

To some extent this difference in susceptibility of bacteria to antibiotics explain differences in therapeutic response.

In addition to *natural resistance* among strains of bacteria there is the problem of induced or acquired resistance. Resistance to the action of penicillin has been induced in organisms which were initially sensitive to the drug by growing them in a medium in which the concentration of penicillin is progressively increased. Resistance to penicillin has been developed by strains of *Staph. aureus, Str. hemolyticus,* and *N. gonorrhoeae,* among others. In a similar manner strains of gonococci and meningococci have become resistant following repeated transfer in increasing concentrations of streptomycin. Of much more serious nature has been the clinical experience that strains of staphylococci develop resistance during treatment with penicillin. Strains of coli-aerogenes bacilli may quickly become resistant to streptomycin. At this time susceptible strains of bacteria appear to develop resistance to streptomycin more easily and speedily than they do to penicillin.

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Toxicity of Penicillin and Streptomycin

Penicillin. No significant toxic effects have been noted following systemic therapy with the sodium or calcium salt of penicillin. The most common complication is urticaria. Urticarial wheals appear between the fifth and tenth day of treatment. These may be benefited by epinephrine or benadryl. There may be a transient azotemia. Thrombophlebitis occurs during continuous intravenous medication. The intrathecal injection may produce headache, vomiting and pleocytosis. Walker among others notes that penicillin given intrathecally can cause changes in the arachnoid, alter nerve fibers and produce radiculitis. Convulsions may occur.

Streptomycin. A number of toxic reactions have been noted following parenteral injection of streptomycin. Among these are flushing of the skin, and a sense of fullness shortly after injection of the drug. Headache, transient urticaria and fever may occur also. Buggs et al. report two patients who lost consciousness following rapid intravenous injection. Recovery occurred in a few minutes. Thrombophlebitis occurs. There may be generalized aches and pains in the joints. Fatty metamorphoses in parenchymal cells of the liver and the tubular epithelium of kidneys have been seen in experimental animals. Eighth nerve deafness has occurred also. When the dosage in adults is kept under 1.0 Gm. daily, few reactions occur.

Clinical Use of Penicillin and Streptomycin

Penicillin is a drug possessing herculean ability to combat infection caused by a number of bacteria. It is not a panacea for all of the infectious diseases; its use in serious illness is based on an understanding of the underlying disease process. Of itself, it cannot promote healing except by bringing to a halt bacterial growth. By retarding bacterial growth the normal defense and reparative mechanisms of the body are mobilized.

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Streptomycin is a more recent antibiotic than penicillin. Its field of usefulness has been tested by many clinical investigators under the direction of the National Research Council. The entire range of use-

fulness of this drug has not been adequately explored, but, existent knowledge in view, streptomycin is not as good as penicillin for at least two reasons, namely (a) it is more toxic, and (b) bacteria quickly develop resistance to its action.

Microorganisms that are susceptible to the action of streptomycin vary widely in their sensitivity. As noted earlier, many strains of organisms initially susceptible to 5 or 10 micrograms of streptomycin per cc. often acquire resistance *in vitro* to enormous amounts of this drug. It has also been shown that in the presence of blood or serum the tolerance of bacteria to streptomycin may be increased 4 to 8 times. It is desirable then to maintain a concentration of streptomycin in the blood 4 to 8 times that necessary to inhibit the bacteria *in vitro*.

Streptomycin is active against bacteria which have proved most resistant to penicillin, namely the gram negative bacteria. It is also effective against some gram positive bacteria.

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Summary

This review brings together somewhat summarily recent clinical and experimental observations concerning two antibiotic substances, penicillin and streptomycin. Penicillin, used first in crude form, has been explored in the treatment of infections more completely than streptomycin. Its field of usefulness is wider than that of streptomycin. In the past few years with further purification of penicillin, a number of fractions have been identified, known in this country as penicillin F, G, K, and X. Commercial penicillins consists almost entirely of penicillin G; some may contain appreciable amounts of penicillin X. Some of these fractions are more active against bacteria than others. Further clinical and experimental observations will be needed to fully evaluate the place of these penicillin fractions in therapy.

Streptomycin is a valuable antibiotic, but in comparison with penicillin, it has a number of drawbacks. It is more toxic to humans and bacteria quickly develop resistance to it. These limitations have been amplified in the text.

The search for antibiotics is carried on in many places. Undoubtedly, there will be additional substances found which will prove valuable in the treatment of diseases caused by microorganisms insensitive at this time to antibiotics which are not harmful to the economy of the human cell mass. (1947)

Court Denies Osteopaths' Request

Between April 19 and April 22, 1948, the trial of a case filed by osteopaths of Kansas against the Governor and the Attorney General was heard in Topeka. Three United States Circuit Court judges heard the testimony of eight or nine osteopaths and a comparable number of doctors of medicine regarding whether or not the Supreme Court in this state had been arbitrary and capricious in its decision to limit the practice of osteopathy. The plaintiffs pleaded that their rights under the 14th amendment to the Constitution of the United States had been violated in Kansas.

On November 16, 1948, a verdict was given, stating in part that "it is ordered and decreed that the prayer of the plaintiffs for injunctive relief be and the same is hereby denied, and the action is dismissed at the cost of the plaintiffs." The judgment and decree was signed by the three judges hearing the case.

At the same time they issued a preliminary statement entitled "Findings of Fact and Conclusions of Law." This document outlines various points around which the case was argued and among those the following statements may be found: "It is peculiarly within the province of the State of Kansas to classify and regulate the right to pursue a calling or profession having to do with the public health. The nature of the classification and the requisite qualifications for license to pursue a profession within such classification must largely depend upon the judgement of the State. The only limitation imposed upon the exercise of that power by the due process and equal protection clauses of the Constitution of the United States is that the classification shall not be arbitrary; shall bear some reasonable relationship to the legislative object, and shall not be discriminatory in its application and effect within the prescribed classification. If the required qualifications to pursue a calling or profession are obtainable by reasonable study and application, they are not arbitrary or unreasonable. . . .

"The fundamental difference in the scientific approach of the osteopathic and medical profession furnishes a valid basis for the classification made out by the challenged statute. . . .

"The classification, and the regulation based thereon, are not arbitrary or unreasonable; that the restrictions imposed upon each classification do not operate to deprive the osteopathic profession of due process or equal protection of the laws. The injunctive relief sought is therefore denied."

/s/ Orie L. Phillips
U. S. Circuit Judge
/s/ Walter A. Huxman
U. S. Circuit Judge
/s/ Alfred P. Murrah
U. S. Circuit Judge

It presumed that a detailed opinion from the court will be prepared, possibly within a month. When available, the JOURNAL will carry this information to the membership. In the meantime, the case probably is not closed at this point. Attorneys for the plaintiffs declared during the trial that the case would be appealed to the Supreme Court of the United States should this court find against them. If they are still of the same opinion, it may be some time before this question is finally determined. (1948)

A Tribute to Franklin D. Murphy, M.D.

In this issue, largely devoted to contributions from the faculty of the School of Medicine of the University of Kansas, it seems appropriate to pay tribute to Dean Franklin D. Murphy. Since his appointment to this position in July 1948, he has accomplished an unbelievable number of tasks. He has won the confidence of the medical profession and has begun a far-reaching program of public service.

In the span of a few months Dr. Murphy and other Kansas physicians developed the Kansas Plan, which has achieved not only national recognition in the lay press but has brought about the active cooperation of the Kansas Farm Bureau and the Kansas Medical Society. It has furthermore obtained a grant of some four million dollars for expansion of the School of Medicine.

It is noteworthy that Dr. Murphy's interests are not confined to the school. As a member of the Kansas Medical Society he has given his assistance to each project this organization pursues. He has spoken before most of the component medical societies. He has attended many committee meetings. He has co-operated in a real and personal way upon every occasion when his services were requested.

Dr. Murphy was appointed chairman of the Governor's Advisory Committee on Mental Institutions and has been a large influence in an effort now nearing success toward improving the mental hospitals in this state. He has spoken before national and regional meetings of the American Medical Association and before medical Auxiliaries and innumerable lay groups.

It is Dr. Murphy's philosophy that the University of Kansas School of Medicine must serve the people of this state. The school and the Kansas Medical Society have united their efforts toward the end that the entire medical profession may give the people of Kansas the finest medical care in the world.

The Kansas Medical Society is proud of the work that Dr. Murphy has accomplished and is happy to include the Medical School in its public service projects. The JOURNAL, speaking for the Society, wishes him many years of continuing success on ever widening planes, and pledges its support to Dr. Murphy, his Board of Regents and his faculty in the interest of the people of Kansas. (1949)

The Clinical Applications of Radioactive Isotopes in Small Hospitals

FRANK E. HOECKER, Ph.D., Lawrence and HOMER L. HIEBERT, M.D., Topeka

During the approximately five-year period in which artificially radioactive substances have been available in large quantities for clinical applications, their use has been confined almost entirely to the larger centers of population. The more or less routine use of radioactive iodine and radioactive phosphorus has, in many cases, been the natural outgrowth of early studies in research laboratories connected with large hospitals or medical schools. In these large institutions the necessary laboratory facilities and trained personnel are already available. On the other hand, such specialized facilities and staff are seldom available to the hospitals in small communities. As a consequence, the advantages of diagnosis or treatment based on the use of radioactive isotopes are not at this time generally accessible to the less densely populated areas of the country.

The writers, in close cooperation with the physicians and hospitals of the Topeka area, have undertaken to develop a program which makes these advantages available to the people of this community. In setting up this program, under somewhat less than ideal conditions so far as laboratory facilities and staff time are concerned, a number of problems have been encountered which might be typical of any attempt made under similar circumstances. It is our purpose to discuss these problems and to indicate what appear to be reasonable methods of overcoming certain limitations.

All applications of radioactive substances, whether in research, in industry or in medicine, are fraught with considerable danger, the actual degree being dependent upon the amount used, the particular material used and the purpose and manner of use. This is especially true in clinical applications because the exigencies of such uses may endanger not only the patient and the person who administers the material but also the hospital and community as well. These circumstances have exerted a severely restrictive influence on the spread of treatment and diagnosis by means of radioactive substances. These materials must, therefore, be used only with proper laboratory equipment and by specially trained individuals.

Nevertheless, in the presence of adequate equipment and in the hands of properly trained personnel, the application of carefully chosen radioactive isotopes for clinical purposes provides unique advantages not available through any other medium. However, the avoidance of danger to the patient imposes strict limitations on the choice of radioactive substances. The life of the substance in the body and the amount of energy liberated in the tissue must be carefully considered. Furthermore, the differential absorption of the radioisotope in the body must be known. The latter constitutes the most severe therapeutic limitation since it must be highly absorbed by the tissues to be treated and and absorbed only slightly or not at all by other tissues.

In effect, the above considerations limit the internal use of radioactive isotopes at present, both diagnostically and therapeutically, to only four or five. The most useful one at present is radioactive iodine, I^{131}. Perhaps second on the list comes radiophosphorus, P^{32}, while radiosodium and radiogold come probably third and fourth. Other substances are even more rarely used.

It would be a mistake to infer that either the diagnostic or therapeutic use of any of these substances is standardized. Neither the mode of administration, the amount administered, nor the technique of interpretation is yet reduced to a generally accepted procedure. Perhaps least of all is the equipment either dependable or standardized. The internal clinical applications of radioactive substances are now in a stage comparable to that of x-rays 40 years ago. Such uses are still in the research phase and require the expenditure of unexpectedly large amounts of time on the part of the technical staff.

It is, of course, well known that complete control over the use of radioactive isotopes is exercised by the United States Atomic Energy Commission. Permission to obtain these substances for administration to human beings is obtainable only by an institution, not by an individual, and then only when the commission is satisfied with respect to the possession by the hospital of adequate facilities and the availability of properly trained personnel. The matter of facilities can usually be taken care of by any hospital which is willing to assign laboratory space and spend a sum of from $3,000 to $5,000 for specialized equipment.

Trained personnel are not always so easily provided. The Atomic Energy Commission requires that the hospital appoint an isotopes committee composed of members of its staff. It should comprise an internist, a pathologist, a radiologist with training and experience in administration of radioactive isotopes, and a radiophysicist. At present the number of radiologists with the requisite training and experience is small, while

the number of radiophysicists who are able to devote a portion of their time to hospital work and are at the same time accessible to the hospital is extremely small.

The organization of the Topeka isotope program began in late 1950, when a small group of local physicians discussed with one of the writers (H.L.H.) the possibilities of bringing radioactive materials to the community. The undertaking seemed feasible provided that consultation services of a radiophysicist could be obtained.

This was solved through the University of Kansas which made available a certified radiophysicist (F.E.H.).

Laboratory space was offered by St. Francis Hospital and Stormont-Vail Hospitals. Space was immediately available in Vail Hospital and the laboratory was established there for the reason. The necessary funds for the purchase of equipment were provided through the cooperative efforts of the executive director and the trustees of Stormont-Vail Hospitals.

A number of interested physicians asked for a preparatory orientation course in the diagnostic and therapeutic uses of radioisotopes. The course, "The Medical Application of Radioactive Isotopes" (32 lecture hours), was arranged through the University of Kansas Extension Division, and was given by one of the writers (F.E.H.) to 25 enrolled physicians.

Our first isotope clinic was held in July, 1951. Diagnostic tracer studies with I^{131} were done on seven patients, and one patient in thyroid crisis was treated with I^{131}. Dr. Kenneth E. Corrigan, director of radiation research and in charge of the isotope laboratory in Harper Hospital, Detroit, Michigan, assisted with the studies and gave additional impetus to the program with illustrated lectures to the physicians.

It was indicated earlier that radioactive iodine, I^{131}, has at present wider application in clinical medicine than any other radioisotope. This follows in consequence of its almost ideal physical properties—a convenient half-life, the emission of beta particles which impart a localized tissue dose, and the emission of gamma rays which permit external measurements in vivo. It has also the rare biochemical property of almost perfect localization in the thyroid gland within a few hours after its administration.

It has been established that the measurement of the rate of uptake and the total uptake of I^{131} by the thyroid gland, together with excretion studies, yields diagnostic information which is more dependable than the measurement of the basal metabolic rate. This is unquestionably true in the case of uncooperative patients and children.

The therapeutic use of I^{131} in the control of hyperthyroidism appears to be the treatment of choice in selected cases. Complete or partial thyroidectomy through accurate control of dose can be performed without hospitalization of the patient.

For these and other reasons, our radioisotopes program at Topeka was initiated with the diagnostic use, and quickly expanded to include the therapeutic use of I^{131}.

The amount of information gained from these studies is, of course, a function of the amount of time devoted to the work. The writers have felt that detailed measurements of uptake in various portions of the thyroid yield diagnostic information well worth the additional time required. Careful surveys are, therefore, made on each patient four times during the first 24 hours by placing a shielded end-window Geiger counter in contact with the skin over the thyroid area. An indicating, computing rate meter, the Raychronometer, is used to determine the counting rate at each point of measurement. The resulting data furnish a clear picture of the rate of uptake in various portions of the gland. In addition to asymmetry of function, toxic adenomas, aberrant thyroid tissue, and other abnormalities are clearly revealed. Such information, not obtainable from the widely used distance-count method, is often of critical importance to the surgeon if surgical intervention is indicated.

Early research work on the diagnostic use of I^{131} almost invariably included measurement of the rate of excretion in the urine. There is little doubt of the diagnostic value of such measurements, but excretion measurements are, when performed by customary methods, exceedingly time consuming. The usual method is to assay a portion of each specimen, either by evaporating the sample to dryness or by direct counting of the wet sample. The time involved and the trouble of saving all excreted specimens have tended to discourage the making of excretion studies in routine clinical use.

Our conviction of the value of excretion studies has led to the development in our laboratory of a rapid, semi-automatic method of making the assays required by the excretion studies. The assay of all specimens excreted by 10 patients in 36 hours can now be performed by one person in a period of about four hours. The diagnostic value of the excretion studies is well worth this expenditure of time.

It should be borne in mind that this program was initiated with the objective of testing the feasibility of bringing the clinical advantages of the radioactive isotope method into community hospital practice. No attempt has been made to solicit cases nor to influence physicians in favor of this method. The number of cases accepted for diagnosis has been held to that which could be handled within limitations of a predetermined time and without sacrifice of completeness of study.

To date, eight monthly sessions have been held.

Fifty-eight radioactive iodine tracer studies have been made, and 18 therapeutic doses of I^{131} administered for thyrotoxicosis. In addition, two cases of polycythemia vera, one multiple myeloma, and one case of skeletal metastases have been treated with radioactive phosphorus.

It is our future aim to further expand the isotope laboratory to accommodate the increasing patient load and to include other radioactive materials as they become available. This, we believe, can be accomplished by: (1) substituting mechanical devices for technical assistance wherever possible; and (2) by training existing hospital personnel to do much of the routine work, including sample measurements, thus giving the radiophysicist and radiologist more time to analyze and to evaluate the results.

Finally, it is hoped that our experience may be of some benefit to other community medical centers interested in establishing a clinical isotope program. To these ends, Dr. Franklin D. Murphy, chancellor of the University of Kansas, has endorsed our project and pledged the continued support of the University of Kansas for technical assistance within the limits of its facilities. (1952)

Three and a Half Years Experience with a Bone Bank

J. F. LANCE, M.D., Wichita

We have had a bone bank in operation at St. Francis Hospital, Wichita, Kansas, for three and a half years now; and, although it is not practical or even advisable for most hospitals about the state to have such a facility available, it would seem wise for all physicians to be familiar with the technique and uses as well as the necessity and authority for a bone bank. It is with this thought in mind that we would like to report regarding our experience over the past three and a half years.

The necessity for additional bone for certain orthopedic operations has presented itself to surgeons on many occasions for as long as this type of surgery has been done. In certain patients, notably children, it is difficult or impossible to obtain amounts of bone to complete the operation in question by the usual means, i.e., with the aid of secondary operation on the patient himself or upon a bone donor, which is usually the father or mother of the patient. We have thus used homogenous bone for some time, but only for a short time have we had a method of preserving bone formerly discarded. Operations, such as spinal fusions for scoliosis or the filling of a large bone cyst, for example, present problems in which a large quantity of bone is necessary and may not be obtainable from the patient himself.

Although the use of homogenous bone was first reported as early as 1878, it was not until 1942 that Alberto Inclan of Havana, Cuba, reported on the use of a preserved bone graft in orthopedic surgery. Alan DeForest Smith of New York City employed bone refrigerated for 18 days at about plus 2° to plus 5° centigrade in 1942, but did not report this fact. It was not until 1945 that a bone bank was first used at the New York Orthopedic Hospital. At the onset, bone which was formerly discarded in many operations was placed in an ordinary refrigerator at plus 2° to plus 5° centigrade where it was kept for periods of up to three weeks. This was shortly changed to a freezer type storage at minus 20° to minus 30° centigrade, were it was found bone could be kept for an indefinite period of time and used with good results. Undoubtedly, the rapid advance in manufacture of deep freeze equipment has tended to give impetus to the present-day use of preserved homogenous bone grafts.

I might mention here another method of storing bone which could have been utilized, i.e., the placing of the bone to be preserved into an aqueous merthiolate solution. This bone may be used without undue complications. However, this method is much more complicated, requiring frequent changes of solution and handling of the bone. Also, it means introducing a foreign, toxic substance into the operative wound.

Late in 1949 a "deep freeze" was obtained at St. Francis Hospital, Wichita, Kansas, and on January 3, 1950, our first entry to the bone bank was made. It so happened that our first bone was obtained from a 16-year-old boy who had experienced a sudden, traumatic death. Bone from a cadaver, removed within a few hours after death under surgical aseptic conditions and placed in the freezer, can be utilized just as well as bone removed from a live donor and placed in the bank. Other bone for our bank has come from the following sources:

1. Cadaver-tibia, fibula, ilium.

2. Ribs from non-infected and benign thoracotomy cases.

3. Amputations—tibia, fibula, os calcis, astragalus, and metatarsals.

4. Ilium.

5. Clavicle.

6. Patella.

7. Ulna.

8. Boiled bone from any of the previously-mentioned sources.

In all of these cases, the bone saved in the bank represented bone which would formerly have been discarded. When bone is placed into the bank, which is maintained at about minus 20° centigrade, the following data are obtained: the donor's name, his age, his serology report, the name of the doctor supplying the bone, and the type of bone. Formerly we obtained the blood type and the Rh type; however, we, as well as other users of the bone bank, have found this information unnecessary. The bone is placed within a sterile jar, which is placed inside of another sterile jar. The bone is cultured in a brain broth preparation which is placed in an incubator for a period of not less than two weeks. Thanks to our laboratory and their careful checking of these cultures, we have yet to encounter our first case of postoperative infection following the use of bank bone. We have had to discard bone—yes—but we have never had an infection.

Upon withdrawing bone from the bank, the following data are entered on our records: the recipient's name, the type of operation being performed, and the date.

The bone obtained from the first donor is all gone now; however, there were several pieces used after being in the freezer for 18 months. The bone which had been in the freezer for 18 months was used with clinically as good a result as with any other bone used. This represents the successful use of bone stored longer than any other case reported to date.

On some operations, several bottles of bone have been used, and in other cases a portion of the bone from one bottle has been used, the remainder being recultured and returned to the bank. Every time a bottle of bone is opened and returned, it is recultured. The contents of one bottle, which incidentally was the first entry, was used on seven different operations. No apparent harm to the bone results from the thawing and refreezing procedure.

Number of entries	190
Sterile entries	155
Contaminated entries discarded	32
Contaminated entries boiled and used	3
Number of operations in which bone bank used	160

Bone from the bank has been used in a great variety of operations to make up this total of 160 operations. The following is a fairly complete list:

Filling of bone cysts	11 cases
Congenital pseudoarthrosis of tibia	6 cases
Construction of hip shelf	4 cases
Spinal fusion	103 cases
a. Scoliosis, 47 cases	
b. Spondylolisthesis, 27 cases	
c. Others, 29 cases	
Fractures	8 cases
a. Fresh	
b. Nonunion	
Arthrodesis of various joints	10 cases
Used in other hospitals	10 cases
Others	8 cases

Although other writers have proved autogenous bone to be superior to homogenous or bank bone, clinically the bone used for our bank has accomplished its intended function as well as autogenous bone grafts. It has been tolerated by the host tissue in all cases, and there have been no cases of slough or infection. We have been able to successfully complete certain procedures with ease that would have been impossible or done at great risk and difficulty without bank bone.

In conclusion, it can safely be said that the development of the bone bank is one of the most important advances in orthopedic surgery; however, it should be emphasized that the use of bank bone is not intended to replace the use of autogenous bone but is to serve as an adjunct in grafting when it is impossible or impractical to obtain enough bone from autogenous sources. (1953)

TO THE EDITOR—OF THE

Journal of the Kansas Medical Society

2059 A.D.

THE JOURNAL OF THE KANSAS MEDICAL SOCIETY

315 WEST FOURTH STREET, TOPEKA, KANSAS

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May, 1959

My Dear Successor:

Perhaps you will be searching the "old Journals" of our day in preparing for the Society's Bi-Centennial. I hope that if you are you may have some of the admiration for our efforts that we have developed for the pioneers of a century ago, since we have made our search through the Transactions and the Journal to prepare this Centennial volume. We have gained a better perspective of our predecessors, and some insight into the difficulties they faced and overcame.

We wonder that they did so much with so little—working without the many "essential" conveniences which we enjoy today. We wonder that, without knowledge of asepsis or antiseptics; without X-ray, electrocardiograms, antibiotics and laboratory procedures, they were able to diagnose and cure any diseases. And yet they did, making use of those facilities which were available. You will be impressed by our clumsy and ineffective procedures and medicines, though today we are convinced that we are far advanced.

It is futile to attempt to predict the conditions of medical practice 100 years hence, but there is one thing which was basic in 1859, in 1959, and I think will be in 2059—to listen to a patient's story and to examine him. Some have had the idea that this was unnecessary, substituting laboratory and X-ray studies and "miracle drugs", but it just doesn't work. A century ago they had to examine the patients; we have to; and so will you.

We have progressed from blood-letting to blood banks, and have learned a degree of control of some diseases which were former terrors (smallpox, typhoid, malaria, pernicious anemia, diabetes, and more recently poliomyelitis), but we are concerned now about others, including heart disease, arteriosclerosis, cancer, and arthritis. You may have learned the answers for our problems, but you will have others—and will also have your own new "miracle drugs" new forms of radiation, and goodness-knows-what else.

We have been impressed by the man-made satellites circling around our earth, and we are told that a couple of them will still be going in your time. Perhaps you will run across them in your space travels.

Please give our best wishes to the other members of your Editorial Board. As we have enjoyed our work for the Journal, I am sure that you will too.

Sincerely,

Orville R Clark

Editor